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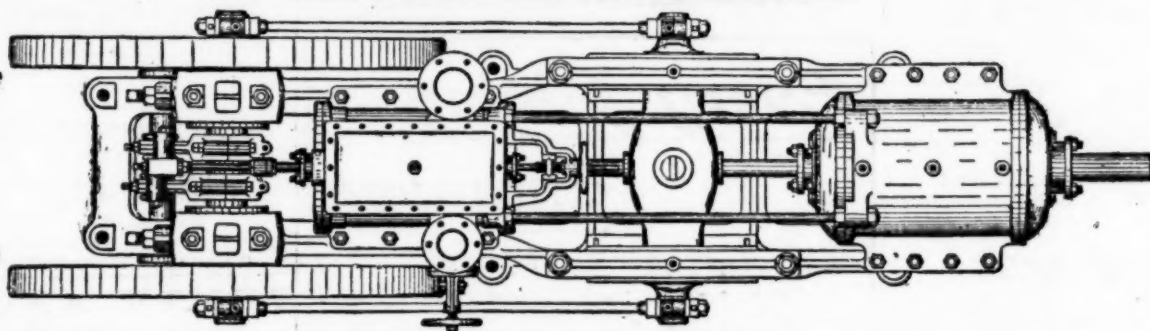
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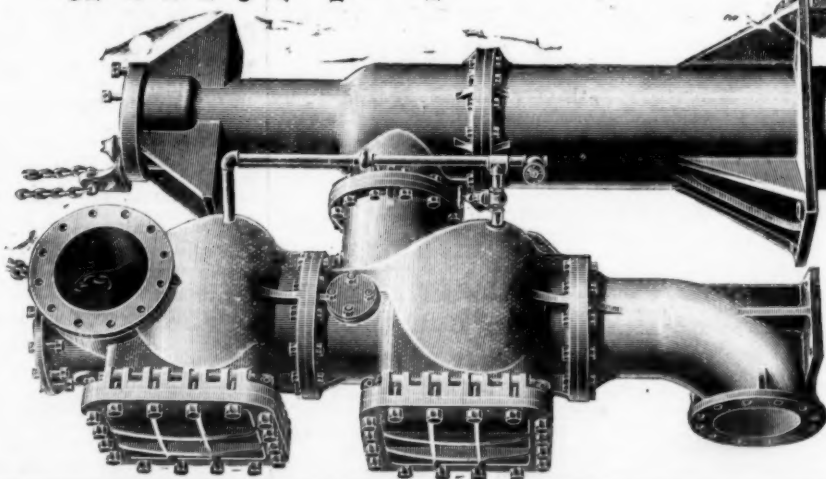
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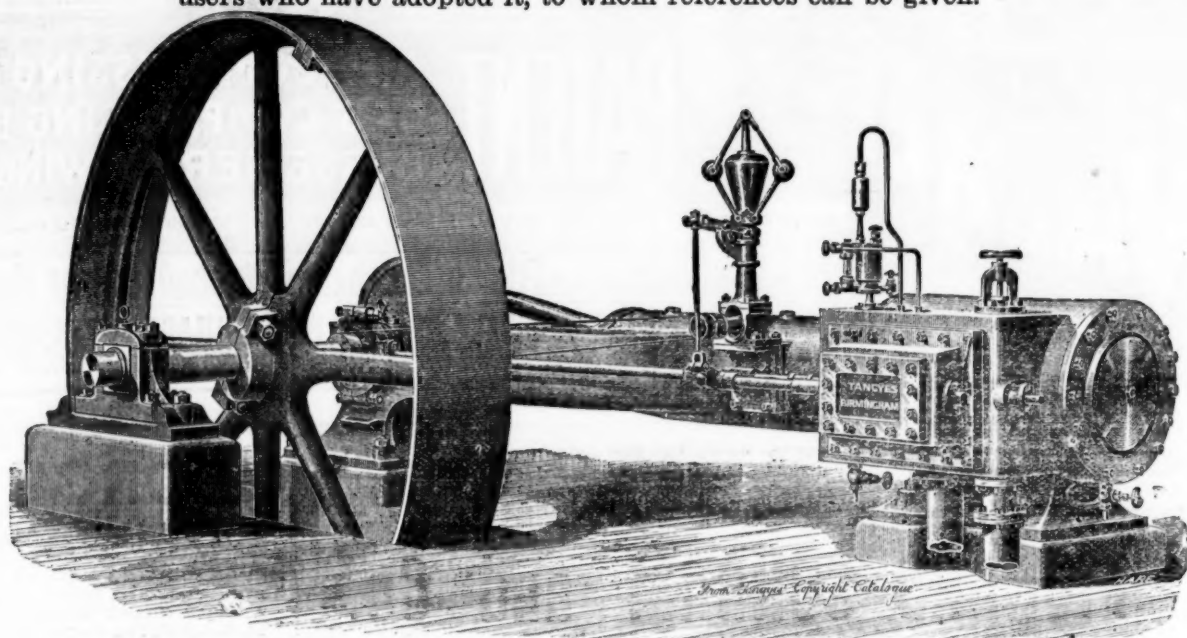


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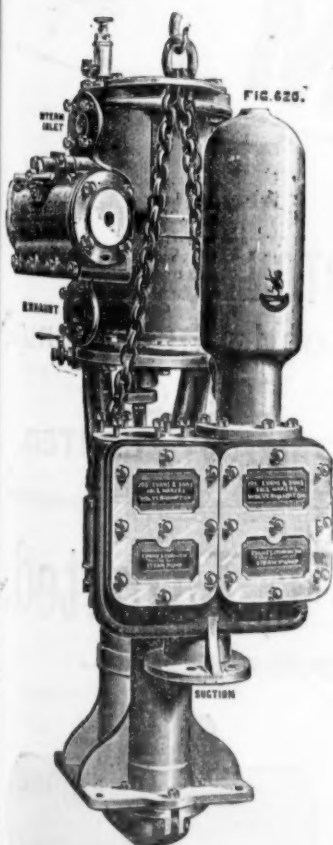
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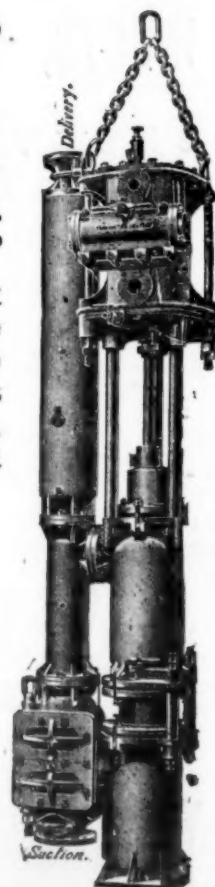
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"CORNISH"
SINKING PUMP.



FIG. 875, "FLUOMETER"
PATENT STEAM VACUUM
PUMP.

The "CORNISH" STEAM PUMP.
The "DUPLEX" STEAM PUMP.
The "RAM" STEAM PUMP.
The "RELIABLE" STEAM PUMP.

DONKEY PUMPS.
HORSE PUMPS,
POWER PUMPS,
AIR COMPRESSORS,
&c.



"STRAIGHT-LINE"
PATTERN
SINKING PUMP

CULWELL WORKS, WOLVERHAMPTON.

WALKERS' PATENT INDESTRUCTIBLE VENTILATING FANS FOR MINES, TUNNELS, &c.
 CONSTRUCTORS OF THE VENTILATING MACHINERY AT THE SEVERN AND MERSEY TUNNELS.

PATENT ANTI-VIBRATION SHUTTER
 Applicable to all enclosed fans

BROTHERS

WALKER PATENT

Engineers, Pagefield Ironworks, WIGAN.

**AIR COMPRESSING ENGINES
 GAS COMPRESSING ENGINES
 BESSEMER BLOWING ENGINES**

upwards of 400 of the above now AT WORK indicating in the aggregate 150,000 Horse-Power

Fisher & Walkers' Patent Friction Clutch & Underground Haulage Machinery
 THIS GEARING IS NOW EXTENSIVELY IN USE FOR HAULAGE PURPOSES.

The objects attained are SIMPLICITY, ENDURANCE OF THE MACHINERY AND ROPES with a MINIMUM EXPENDITURE OF POWER.

NOTICE OF REMOVAL.

Messrs. RICHARD SCHRAM and Co.

beg to announce that they have REMOVED from
 17a, GREAT GEORGE STREET, WESTMINSTER, to

Cannon Street House, London, E.C.,

to which address all communications respecting
 their Air Compressors and Rock Boring Machinery
 should be addressed.

GEORGE GREEN,
 FOUNDRY, ABERYSTWYTH.

SILVER MEDALS AWARDED AT THE ROYAL CORNWALL
 POLYTECHNIC, 1872 & 1876; GOLD MEDAL AWARDED
 AT THE GREAT INTERNATIONAL MINING EXHIBI-
 TION, CRYSTAL PALACE, 1890.

ONLY AWARDS GIVEN FOR CONCENTRATION PLANTS

**GREEN'S LATEST IMPROVED
 Self-Acting or Automatic
 Ore Dressing Machinery.**

A Special Plant, on a reduced scale, has been erected at the
 Works by which samples of METALLIC ORES up to Five Tons
 may be treated, and the commercial value determined. In this
 way the most suitable arrangement of Plant is ascertained, a con-
 siderable advantage to intending Purchasers of Crushing and
 Concentrating Plant.

GOLD STAMP AND OTHER MILLS.
 Estimates, Catalogues, and Full Particulars
 on Application.

Telegrams—Green, Foundry, Aberystwyth.

For PURE ALUMINIUM

98 to 99½ per cent. (98 per cent. minimum guaranteed) in

INGOTS, STICKS, & ROLLING SLABS;

ALSO FOR

**SHEETS, &c., AND
 FERRO-ALUMINIUM.**

ALUMINIUM.

APPLY TO

HENRY R. MERTON & CO.,

2, Metal Exchange Buildings, Leadenhall Avenue,

LONDON, E.C.

AGENTS FOR THE BRITISH ALUMINIUM COMPANY, LIMITED.

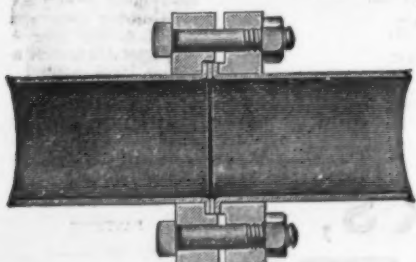
A. & J. STEWART and CLYDESDALE, Limited.
Glasgow, Coatbridge, and Mossend.

WROUGHT IRON WELDED TUBES and FITTINGS for GAS, WATER, and STEAM.
 Light Lap-welded Wrought-iron and Steel Tubes
 (SPECIALLY ADAPTED FOR MINES).

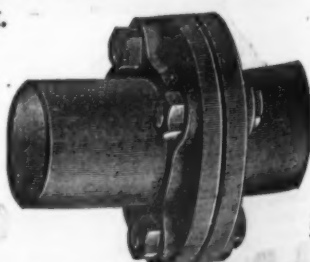
With Patent Flanged Joints (as illustrated) for the Conveyance of Water, Steam,
 and Air, at High and Low Pressures.

LAP-WELDED IRON AND STEEL BOILER TUBES
 FOR LOCOMOTIVE, MARINE, AND OTHER MULTITUBULAR BOILERS.

STEEL & IRON PLATES FOR BOILERS, BRIDGES, &c.



SECTION OF PATENT FLANGED JOINT



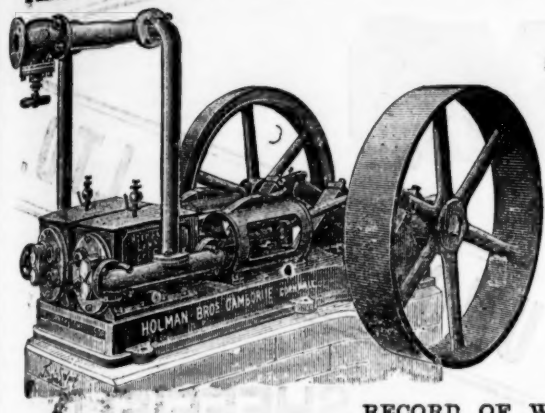
PLAN OF PATENT FLANGED JOINT

Head Offices: **41, OSWALD STREET, GLASGOW.**

HOLMAN Bros., Camborne, Cornwall.

ESTABLISHED 1839.

Patentees and Sole Makers of
"THE CORNISH" ROCK DRILL and "THE CORNISH" COMPRESSOR.



FIRST
SILVER MEDAL,
Highest Award,
Mining Institute
Contest, 1881.



FIRST
SILVER MEDAL
Highest Award,
Royal Cornwall
Polytechnic
Jubilee Exhibition
Contest, 1882.

Three Makers
represented.

Five Makers
represented.

AWARDED SILVER MEDAL INTERNATIONAL
INVENTIONS EXHIBITION, 1885.

RECORD OF WORK DONE

At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour
At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by **5 FEET PERPENDICULAR RISE 46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

Estimates for **ROCK BORING PLANT** and **GENERAL MINING MACHINERY** on Application.

London Offices: 7 and 9, LEADENHALL BUILDINGS, E.C.

AWARDS: CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

CONCENTRATION.

The Clarkson-Stanfield Ore Reduction Co. (Limited).

In the CLARKSON-STANFIELD process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

OUTPUT 1/2 TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS,

6, COLONIAL AVENUE, MINORIES, LONDON, E.

The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carndochan Mine, near Bala, North Wales, will, by arrangement, show their CLARKSON-STANFIELD plant working on a Refractory Low Grade Gold Ore.

JOINT-STOCK COMPANIES.

NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

Egyptian Petroleum Syndicate (Limited).—Registered November 19 by Deacon and Co., 9, Great St. Helen's, E.C. (Capital £120,000, in £1 shares). To apply for and obtain a concession or concessions for working petroleum properties in Egypt or elsewhere, and any mining or other rights in respect to such properties. Registered office, 11, St. Mary Axe, E.C.

Australian Gold and Finance Corporation (Limited).—Registered November 13 by Wm. Sparrow, 15a, Finsbury Square, E.C. (Capital £200,000, in £1 shares—10,000 deferred and 190,000 ordinary). To acquire any mines, mining rights, concessions, grants, leases, options of purchase, &c., and to enter into, carry on, or participate in financial, commercial, mercantile, industrial, manufacturing, mining, and other businesses, works, contracts and undertakings of all kinds. Registered office, Bevis House, Basinghall Street, E.C.

Big Golden Quarry (Limited).—Registered November 21 by Steadman and Co., 11, Old Broad Street, E.C. (Capital £100,000, in £1 shares). To carry on in all or any of the businesses of miners and smelters, refiners, reducers of metal, founders, metal merchants and agents, engineers, dealers in the produce of mines and quarries, general storekeepers, carriers and merchants, agents for the acquisition, sale, disposal of mines, and other property; as shipowners, &c. Registered office, Warfield Court, E.C.

Cervantes Zinc Syndicate (Limited).—Registered November 18 (Capital £25,000 in £1 shares.) Objects: To acquire, develop, turn to account, and deal with the Cervantes Zinc Mine, in the province of Santander, Spain, and to enter into a certain agreement.

Industrial Development and Finance Corporation (Limited).—Registered November 23 (Capital £10,000, in 9950 ordinary shares of £1 each, and 5000 proprietary shares of 5s. each.) Objects: To carry on business as financiers, concessionaires, contractors for public and other works, capitalists, merchants, bankers, &c.

Hannan's Golden Dream (Limited).—Registered November 21 by Burn and Beridge, 11, Old Broad Street, E.C. (Capital £50,000, in £1 shares). To search for, prospect, examine, and explore mines and ground supposed to contain minerals or precious stones; to purchase, take on lease, or otherwise acquire any interest therein, and to deal with any lands or hereditaments of any nature, gold, silver, copper, lead, tin, quicksilver, iron, stone, coal, or other mines, mining, water, timber, and other rights and undertakings connected therewith, and to explore, work, develop, and turn to account the same, and as miners, smelters, and metallurgists generally. Registered office, 77, Bishopsgate Street Within, E.C.

Proved Golden Prospects (Limited).—Registered November 23 by G. G. Smith, 15, Gracechurch Street, E.C. (Capital £25,000, in £1 shares). To carry on business as financiers, promoters of companies, bankers, underwriters, employers, refiners, &c.; to acquire any mines mining concessions, contractors, capitalists, money rights, grants, leases, claims, concessions, options of purchase, metalliferous land, &c., in Australia or elsewhere; to develop and turn to account the same in such manner as the company shall think fit. Registered office, 15, Gracechurch Street, E.C.

WHITAKER'S ALMANACK, 1897.—This highly popular almanack for the coming year is now published. Owing to the several improvements and additions, its bulk is further enlarged to 760 pages. In the supplementary portion there is an interesting article in commemoration of the longest reign in the country's annals, together with a perpetual calendar for finding any date from the creation, with some accounts of the origins of the Gregorian, Julian, and other methods of computing the year. The other portions of the work include the subjects which form a regular feature of the work, &c. which are corrected and brought up to date.

CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

Shaft December 10 (Leeds).—For sinking a shaft 60 yards deep, and filling up the same at Bescop reservoir, for the Leeds Corporation. Apply for particulars to the City Engineer, Municipal Buildings, Leeds. Tenders, endorsed "Shaft at Bescop," must be sent in, addressed to the Town Hall, Leeds, by 10th inst.

Coal December 13 (Bristol).—For supplying coal to their several establishments from January 1 to June 30, 1897, for the Bristol Sanitary authority. Tenders to be sent in by 12th inst., and to be endorsed "Tender for Coal." Forms of tender may be had on application to Mr. D. T. Avers Barges town clerk, 51, Prince Street, Bristol.

Colliery Stores December 14 (South Hutton).—For next year's supply of iron castings, wire ropes, oils, and other colliery stores, except timber, for the South Hutton Coal Company (Limited). Forms of tender and specification, with full conditions may be obtained from Mr. J. R. Lambert, South Hutton, Sunderland, and applicants for forms must state the kind of stores for which they wish to tender.

Slack December 14 (Birmingham).—For the supply of engine slack at the various pumping stations during year 1897 for the water committee. Forms of specification, giving particulars as to the quantity of slack required at the various stations and the conditions of contract, and containing form of tender, can be obtained on application to Mr. E. Antony Lees, secretary, 41, Broad Street, Birmingham. Tenders must be made out on the forms provided, and must reach the secretary by 12 noon on 14th inst.

Various Stores December 15-22 (India Office).—The Secretary of State for India in Council is prepared to receive tenders to supply (1) steel axles, (2) steel rails and fishplates, (3) carriages, &c. (4) locomotives. The conditions of contract may be obtained on application to the Director-General of Stores, India Office, Whitehall, S.W., and tenders are to be delivered at that office by two p.m. on 15th inst. for Nos. 1 and 2, and on 22nd inst. for Nos. 3 and 4.

Timber December 16 (Cardiff).—For the supply of pitwood, propwood, and cogwood during 1897, for the Rixon's Navigation Company (Limited and Reduced), as follows:—(a) 20,000 tons of pitwood, 3000 tons of Swedish or Norwegian props, 2500 tons of cogwood. Full particulars and forms of tender can be obtained on application at the offices of the company, Bute Dock, Cardiff. Tenders must be delivered at the offices by 9 a.m. on 16th inst., and must be in sealed envelopes, addressed to the Chairman, and marked outside "Tender for Pitwood."

Colliery Stores December 16 (Durham).—For supply of stores, iron, timber, &c., for six months ending June 30, 1897, for the Trimdon Coal Company. Forms of tender, which are to be returned on or before 15th inst., can be had on application to the Trimdon Coal Company, Deafhill Colliery, Trimdon Grange.

Various December 23 (The Hague).—For the supply of (1) the underframes, wheels, &c., of a quantity of goods wagons, (2) ironwork of 14 bridges (about 316 tons), (3) about 550 tons of cast iron, (4) screw piles. Application to the Dutch Colonial Ministry at The Hague.

Stores December 23 (Brussels).—For 55 lots of various stores, mostly metallic, for the Government railways. Particulars at the Brussels Bourse. Also, at the same date and place, furnace bars for the Government steamships.

Adits December 29 (Hull).—For driving adits, building bore shaft, boring, &c., at their Cottingham pumping station, for the Hull Corporation. Copies of specification, plan, and form of tender, and other particulars, may be obtained on application to the Corporation, Cottingham, Hull.

be obtained of Mr. F. J. Bancroft, waterworks engineer, Town Hall, Hull, on payment of £2, which will be returned on receipt of a bona fide tender. Cheques and postal orders should be made payable to Mr. T. G. Milner, borough treasurer. Tenders, endorsed "Tender for Adits, &c.," are to be addressed to the Chairman of the Waterworks Committee, and delivered at the Town Clerk's office before noon on 29th inst.

Stores (Tunstall).—For the supply of stores and materials for 12 months ending December 31, 1897, for the Chatterley-Whitfield Collieries (Limited). Forms of tender and all information may be obtained at the company's offices, Tunstall, North Staffordshire. Mr. J. H. Wain, secretary.

Sinking Well (Denny, Scotland).—For sinking a deep well. For particulars apply Carron Grove Paperworks, Denny.

NEW PATENTS.

LIST OF APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs. Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

26199 Gustaf Dillberg and William Walker, 45, Chancery Lane, London.—An improved gold saving and amalgamating machine.

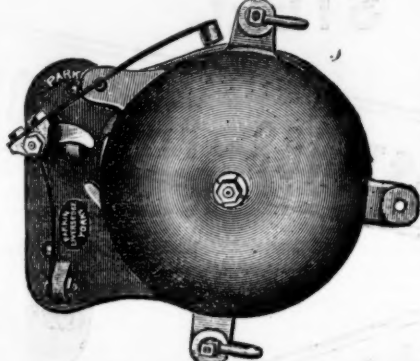
26507 Carl Schwarz and Albert Weishut, 28, Southampton Buildings, Chancery Lane, London.—Process of manufacturing ferro-manganese or copper manganese, or copper sulphur, or sulphuric acid from sulphurated iron or copper ores.

26511 Albert William Daw and Zacharias William Daw, 32, Chancery Lane, London.—Improvements in machines for undercutting coal and channeling stone and other minerals.

26906 Thomas C. Fawcett (Limited) and Joshua Swallow, Hatton Garden, London.—Improvements in or relating to the treatment of purple or other ores and bye-products obtained from chemical works for the extraction of iron.

THE KIMBERLEY DIAMOND MINES.—Professor William Crookes, F.R.S., delivered his second lecture on the diamond mines of Kimberley on Monday night at the Imperial Institute. Sir David Tennant, Agent-General for the Cape Colony, presided over a large audience. After a full description of the working of the diamond mines, the lecturer mentioned that the four principal mines employed about 8,000 persons, of whom 1,500 were whites and 6,500 blacks. From two to three million carats of diamonds were turned out of the De Beers Mines in a year, and up to the end of 1892 ten tons of diamonds, valued at £60,000,000, had come from those mines. In 1895 there were found 2,435,541 carats of diamonds, realising £3,105,958, at an expenditure of £1,704,813, and leaving a profit of £1,401,145. The De Beers Company could raise more diamonds than were represented by those figures, but it had been found that the demand for the stone did not exceed four or four and a-half millions sterling annually, and the output was accordingly restricted in order to maintain the price. Large diamonds were not so uncommon as was supposed. Stones weighing over an ounce (151.5 carats) were not infrequent at Kimberley, and the largest found so far in that mine weighed 4284 carats in the rough and 2284 carats after being cut. The largest known diamond, weighing 970 carats, was found at the Jagersfontein Mine, and was now being cut at Amsterdam.—A vote of thanks to the lecturer terminated the proceedings.

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EVERY OTHER WEEK.

These **SIGNAL BELLS** are the **BEST** and consequently **CHEAPEST** in the market.

All sizes from 4 in. to 12 in. for all purposes.
All Fittings steel. No perceptible wear after years of work.
Simple neat and good. Thoroughly reliable.
Prices and particulars—

PARKIN, LIVERSEDEGE, YORKSHIRE.

SOLE AGENTS FOR SCOTLAND:

Messrs. **ARCHD. BAIRD and SON,**
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Export Agent—**Mr. STEPHEN HUMBLE, Junr.,**
Emerson Street, Southwark, S.E.

MINING AND INDUSTRIAL EXCHANGE OF NEW YORK.

THIS EXCHANGE is in communication with every Mining District of the United States. It advises investors as to the progress and condition of Mining Companies, and executes Orders for Stocks. It arranges for the Examination of Mining Properties by Qualified Experts at a reasonable cost. It has many first-class Productive Mines on its books for sale on strictly "bed-rock" terms. Its business connections are of the highest character. All communications should be addressed to the SECRETARY,

Mr. CHARLES MILES,
179, WASHINGTON BUILDING, NEW YORK CITY, N.Y.
LONDON OFFICE: 10, Basinghall Street, E.C.

STEEL CASTINGS AND FORGINGS

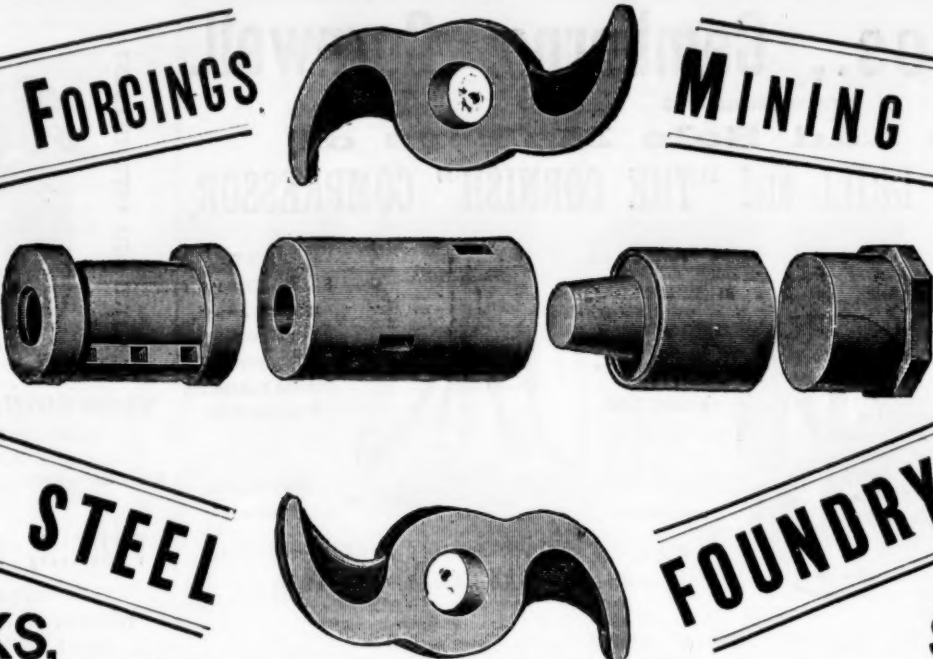
HADFIELD'S STEEL

HECLA WORKS,

FOUNDRY CO., LTD.

SHEFFIELD.

FOR MINING MACHINERY



JOHN DAVIS & SON, ALL SAINTS WORKS, DERBY;
Electric Light and Transmission of Power. 118, NEWGATE ST., LONDON, E.C.;
and 5, BUTE CRESCENT, CARDIFF.



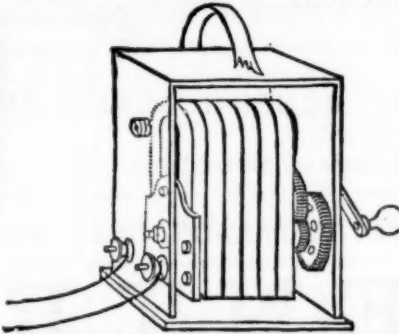
JEFFREY MACHINES FOR UNDERCUTTING COAL.
Worked either by Compressed Air or Electricity.
OVER 700 IN DAILY USE.

ELECTRIC LIGHTING. ELECTRIC HAULING.
ELECTRIC PUMPING. ELECTRIC DRILLING.

DAVIS AND STOKES'
PATENT SAFETY ELECTRIC MINING MOTOR.
ELECTRIC SIGNALS. TELEPHONES.

ESTIMATES AND CATALOGUES UPON APPLICATION.

BRASS AND
ALUMINIUM
FOUNDERS.



ELECTRIC BLASTING APPARATUS.
High or Low Tension.
MAGNETO EXPLODERS.
CABLES. FUSES.

THE CYANIDE PROCESS.

ZINC V. ELECTROLYTIC PRECIPITATION.

(From the South African Mining Journal.)

(Continued from page 1538).

Slimes Treatment.

WITH regard to this, Mr. Yates himself frankly admits that the electric process is without a rival. With your permission I will, in conclusion, enlarge somewhat upon this point. The importance of the fact that ordinary low-grade slimes can now be profitably treated on a commercial scale is, as yet, hardly generally appreciated. For the first time in the history of the metallurgy of gold in the Transvaal has it been possible to treat all products of the ore—free gold, concentrates, tailings, and slimes; and not only this, but the necessity which now hampers mining companies, of retaining as much pulp as possible in the tailings vats at the risk of rendering the sands more or less slimy and unleachable, will disappear. Since slimes can be successfully treated separately, only so much of the mill pulp as is perfectly leachable need be retained in the tailings vats, with a consequent improvement over present extractions. So rapidly is the slimes treatment advancing, that early in 1897 slimes plants capable of treating upwards of 50,000 tons monthly will be at work, and within a year's time a slimes plant will be considered just as necessary a complement to the mill as a tailings plant. This combination of tailings and slimes plant, with a single staff and management, will be of peculiar economic advantage, as may now be shown. As is well known, every ton of water now introduced, as moisture in the tailings, into the stock of solution in a cyanide works means a ton of dilute solution discharged, usually as moisture in the residues, otherwise in time the storage vats would overflow. The gold and cyanide contents of this dilute solution are at present lost, but where a slimes plant exists this dilute solution will be utilised for dissolving the gold out of the slimes, for which purpose very dilute solutions suffice. Moreover, since electric precipitation is necessary in slimes treatment, the extension of this method to the tailings plant, to avoid a double system, can be readily carried out. It would, in fact, be necessary to do so on account of the complications and difficulties introduced into electric precipitations, were solutions employed charged with soluble compounds of zinc, derived from tailings plants where zinc is used. The ready solubility of the gold contents of fresh slimes in extremely dilute solutions has long been known, and the principle of agitating with a solvent, allowing to settle, decanting off the supernatant liquid, and washing with water in the same manner, is one familiar to all. On a large scale, however, as in all other processes advanced beyond the laboratory stage, many obstacles arise in carrying out the details of this plan, and the success of the whole depends upon the success of all the details involved. As in a slimes plant, about 7 tons of solution have to be handled for every ton of slimes treated, the pumping and precipitating capacity of a plant, capable of treating (say) 15,000 tons monthly, is necessarily enormous, amounting to upwards of 100,000 tons per month. The gold contents of the solution, after passing the extractors, must be brought down very low, since with every ton of treated slimes there is discharged a ton of dilute solution, and any appreciable gold and cyanide in this is an absolute loss. Hence the necessity of perfect precipitation from very weak solutions. The laws governing the rate of settlement of slimes depend upon the nature of the slimes; upon the depth of the vat;

upon the ratio of slimes and solution in the mixture; and upon the influence of various agents, such as lime, used to accelerate settling. Very careful study is required to determine the form of plant and the method of treatment most suitable under these complicated conditions. Various other slimes processes besides the one now adopted have been tried, but finally discarded after careful trial; filter presses, travelling band filter cloths, and drying and mixing of slimes with coarser material, to assist leaching, are all open to this objection. In the treatment of slimes fresh from the mill the very ready solubility of the gold is liable to cause serious difficulty. If traces of cyanide solution remain in the first of double treatment vats after discharge, some of the gold contained in the overflowing slimes, when the vat is next charged, is liable to dissolve, and, though this may only be a grain or two per ton of water, yet the great excess of water over solid slimes makes the loss very considerable. With regard to old slimes from slimes dams, their treatment is further complicated by the presence of various sulphates, free acid, &c., produced by the oxidation of the pyrites, and further complicated by decomposed animal and greasy matter from the mine and the mill. The difficulties encountered are not apparent in laboratory trials, but on actual working a great deal of experience is necessary to cope with these difficulties, and it is only slowly acquired, by much labour and experiment and the expenditure of large amounts of money. Incidentally, the general introduction of slimes treatment will produce a useful effect in necessitating better methods of determining tonnage treated in the battery and cyanide works; the monthly tonnage of sands, plus that of the slimes, will have to equal the weight of the ore crushed during the month in the mill. I have now briefly reviewed the field of operation and the capabilities of electric precipitation, and I think it is apparent, from the facts I have stated, that while zinc has in its day done good service, it no longer meets modern requirements, and must be superseded by electricity.

Mr. McBRIDE said: I regret that the time at my disposal lately has prevented me from giving the subject the attention I should desire, but I am convinced that it will not be settled at a single sitting of the society, and I, therefore, hope to deal with it again at a future meeting. Mr. Yates has a good case for zinc precipitation, and Mr. Von Gernet may be relied upon to combat the questions raised in a masterly style. At the same time, the testimony of either of these gentlemen, where proof is not forthcoming, must be accepted with more or less bias, because they are both interested parties. It is unfortunate for the electrical precipitation process that the managers of the various electrical plants at present working have been employed by the Rand Central Ore Reduction Company, and are, therefore, naturally biased in favour of that company's process. On the other hand, the African Gold Recovery Company has gradually drifted out of working their own process, and few of their men are now in charge of cyanide works. This company has allowed the zinc process to be developed by outside individuals, and the Ore Reduction Company took the lead in introducing many mechanical improvements in the process until they became part owners of the other. It is, I think, worthy of note that the men who are now working the zinc process are independent of and uninterested in either. They, with few exceptions, were never employed by the African Gold Recovery Company, and, being employed by mining companies, I hold that it is their duty, when their opinion is solicited, to give it conscientiously to the best of their knowledge. Though I have not worked the electrical precipitation, I have, through the courtesy of Mr. Von Gernet and others, carefully examined and studied the different plants on the Rand. Mr. Williams, in his remarks at the previous meeting, said he inclined to give "his casting vote" in favour of the Siemens-Halske process, leaving us to infer that

the two processes were about equal; but I would endeavour to cast my vote with force and emphasis in favour of the good old zinc precipitation process.

Incidental Costs.

With regard to the incidental costs of plants for the two processes, I consider that Mr. Yates's estimate of only £500 sterling extra for the Siemens-Halske process is very far within the mark. This estimate was reckoned on a 500 tons per day plant. I had the pleasure of reading over a tender last week from the Ore Reduction Company to supply four boxes and one dynamo for a 200 tons plant now being erected. This tender did not include a building, but simply supplying "all of above four boxes and dynamo" for the sum of £3625 sterling. This amount, calculated on a 500 tons per day plant, would represent over £9050 sterling. For the same size of plant, eight boxes, 25 feet by 3 feet by 3 feet, would be more than ample, and these would not cost under £50 each—equal to £400 sterling. In addition to this, over what is required in the extractor house for both processes, there is required in the zinc house a zinc lathe (£90 sterling), filter press and two small vats (£150), and two small vats for sulphuric acid treatment (say £100), or altogether £470 sterling. This leaves a margin of over £8250 sterling of difference in favour of the zinc process on the appliances for the extractor house alone, without taking into account the increased size of building required to house the electrical precipitation boxes. With regard to the increased number of vats required for the electrical process, we have some data published lately of the cost of the May Consolidated by Mr. Osterloh, who deserves great credit for such a thoroughly up-to-date plant. It is a 12,000 tons per month, or 400 tons per day, plant, and is reported to have cost £26,000 sterling. Calculating such a price as this on to a plant of 500 tons, we have £32,500 sterling. If we deduct £11,000 sterling for the extractor house complete, we have £21,500 for the vats. Now, I think it fair to reckon that the zinc process requires three-and-a-half days' treatment in the vats, while the electrical, with dilute solutions, requires five days, or 30 per cent. more capacity. Thus, on the basis of the vats, pipes, &c., and erection for a 500 tons plant, costing £21,500 sterling for the electrical process, a plant to treat the same quantity of tailings by the zinc process would cost £15,050 sterling, or a difference of £6450 sterling in favour of the zinc. This means for the whole plant a margin of £14,700 sterling.

(To be continued.)

QUEENSLAND GOLD RETURNS.

A Reuter's telegram, dated Melbourne, December 7, states that the Queensland gold returns for the month of November are as follows:—Charters Towers crushed 19,000 tons, yielding 20,000 ounces; Gympie 4800 tons, yielding 6800 ounces; Croydon 4500 tons, yielding 9000 ounces; Mount Morgan 8800 tons, yielding 17,000 ounces. The output for other fields amounted to 3200 tons, yielding 4300 ounces. The total for the month amounted to 39,900 tons, yielding 58,000 ounces. The calls paid on the Charters Towers district amounted to £7500; dividends £18,000. The amount paid in calls at Gympie was £8000; dividends £12,000. No calls have been made on the Mount Morgan field, the sum of £25,000 having been paid in dividends.

OIL FUEL IN BURMA.—Experiments have been tried on the Burma State Railway between Rangoon and Puntaza with one of two locomotives recently sent from England, built to consume either oil or coal. So far oil has proved the more expensive—about double the cost of coal. Another trial is to be made between Rangoon and Pegu.

ARSENIC IN COAL.—According to the researches of A. Jorissen, the dust collected from the fires in certain public buildings in Liège consuming coal from local collieries yields, when dissolved in nitro-hydrochloric acid, a solution from which may be precipitated, by the aid of suitable reagents, notable quantities of arsenic, zinc, copper, and lead, together with smaller amounts of selenium, antimony, molybdenum, nickel, and cobalt.

SIBERIAN IRON ORE.—It is reported that an unusually valuable discovery of iron ore has just been made in the neighbourhood of Yenisei-k, in Eastern Siberia. The ore discovered in that district is of remarkable purity, and is said to be even superior to the Swedish in quality.

COAL AT HULL.—During November the entry of coal into Hull via river was 51,160 tons, and via rail 185,655 tons, making a total of 216,815 tons, as compared with 186,232 tons in November, 1895.

A NEW MAP OF THE CHARTERS TOWNS GOLD FIELD.—We have received from that enterprising firm of mining agents, Messrs. E. D. Miles and Co., of Charters Towers, a map of the Charters Towers gold field. Though at the present moment this district is not attracting much attention, nevertheless this fact does not detract from the value of the map, which is well executed and quite up to date.

The next ordinary general meeting of the Consolidated Deep Levels (Limited) will be held at Johannesburg on January 20 next.

SOME ECONOMIC FEATURES IN CONNECTION WITH MINING ON THE WITWATERSRAND GOLD FIELDS, SOUTH AFRICAN REPUBLIC.*

By EDGAR P. RATHBONE

(Continued from page 1514.)

Explosives.

So far as can be ascertained, the cost of explosives on the Witwatersrand amounts to £800,000 per annum, the explosives used consisting of various compounds of nitro-glycerine—that is, dynamite proper and gelatine.

At the present time on the Rand, as a rule, in blasting very hard rock, such as is frequently encountered at great depths, and especially in shaft sinking, gelatine is preferred to dynamite. Gelatine is, generally speaking, under such conditions, a far more economic explosive than dynamite, and it is frequently an error of judgment on the part of those who purchase the explosives to consider first cost only, and not the effect which is to be obtained by the use of the higher explosive. It is also important to use the strongest detonators and the best fuse. There is no economy in using a cheap article in this direction, as misfires naturally mean great waste of time and labour by having to abandon the drill which has so misfired. There cannot be the least doubt to the most careful observer of the underground mining work on the Rand, that there is room for great improvement as regards the manner in which explosives are used. Indeed, it is hardly an exaggeration to state that a miner-like "stope" on the Rand is rarely, if ever, seen. The face of the stope instead, as the name implies, being broken into step-like ledges, which admit of drill holes being placed to economic advantage, is an inclined flat surface, presenting the worst possible conditions for placing drill holes in positions admitting of their being exploded with the greatest economic effect. This condition of things naturally causes great extravagance in the use of explosives, a far greater number of drill holes being put down than is at all necessary to break any given piece of ground. To a large extent, as has been already pointed out, this uneconomical condition of affairs is due to the employment of unskilled labour—i.e., Kaffirs. As an inspector of mines, the author has seen quite an army of natives drilling in a straight line a series of holes, set straight down on a perfectly flat face, without any miner-like supervision being displayed.

If as much attention had been directed towards the prevention of waste in explosives as has been devoted to the question of its reduction in first cost, a great economy in working would already have been effected. It is not intended in this paper to deal with the purely political question as affecting the first high cost of the explosives, such as are included by the Dynamite Commission and Government dues; but, from the following figures, it will at once be seen that a very large percentage of the total cost of mining is absorbed by explosives.

According to the Government returns, which give the tonnage of rock actually raised from the mines, and also the amount of sinking and driving carried out in the Witwatersrand mines some 6,000,000 tons of rock were broken, about half of which was actually milled. In order to break this amount of rock, the returns also show that about 2,500,000 lbs. of dynamite were consumed, and 6,000,000 lbs. of gelatine. This would indicate that the actual cost of rock broken, for explosives alone, is about equal to 2s. per ton. This, as already shown, more or less agrees with the cost which is actually obtained in practice by various companies.

In order to show what a large proportion of the total cost of working is consumed by explosives, it may be stated that from the returns of various companies, the author finds that explosives vary on the cost per ton of working from 2s. to 3s. per ton, the total cost of mining in such cases being from 12s. to 15s. per ton.

Timber.

The total cost of timber and sawn lumber for the Witwatersrand mines, as will be seen by the annual cost bill, amounts to £200,000, a great portion of which may be put down to shaft timbering. The amount of timber used underground, especially at the greater depths which have now been attained in most mines, is remarkably small; in fact, the only economy which could be suggested in the case of some mines would be the more general use of stone "picks," in place of props, as not only do such "picks" support a far larger area of roof surface than props do, but it has the additional advantage of storing the broken rock in the mine, instead of hoisting it to the surface. It might also be suggested that the old rails be more used for roof supports, this being a common practice in the European coal mines.

The total cost of timber naturally varies according to the amount of shaft sinking that is in progress, but, so far as relates to the stopping work, it seems only to vary between 3d. and 6d. per ton. No very great amount of saving in the working cost may, therefore, be looked for in this direction. It is, however, probable that when the extensive plantations of millions of trees which have been planted on the gold fields during the past few years have grown sufficiently large to make useful mining timber, that there will not only be plenty of such timber available, but it will also be much cheaper, as most of the principal prop timber has now to be brought in by ox wagons from districts situated from 50 to 100 miles and more from the gold fields. In this connection it may be mentioned that trees of the Eucalyptus variety grow to a good cutting size easily in 10 years from seed.

The best sawn lumber for shaft purposes is now being brought from West Australia and Oregon, U.S.A., or, in other words, from localities situated from 8000 to 12,000 miles distant from the gold fields.

With the opening up of South Africa by railways, doubtless some of the northern districts, in which large timber is known to exist, will be able to compete for a portion of this trade, but a more enlightened railway policy will be necessary to such an end.

Cyanide

The next largest factor in the bill of costs of the Witwatersrand mining is that of cyanide, which, so far as can be ascertained, amounts to a total of £240,000 per annum. From various companies' returns the actual cost of treating a ton of tailings, exclusive of royalty, by the cyanide process varies from 2s. 6d. up to about 4s., the lower cost being principally due to the extensive scale of operations upon which the process is conducted.

With the larger plants the actual cost of the cyanide consumed, per ton of tailings treated, varies between about 1s. 6d. to 2s. a ton, whilst the labour employed in charging and discharging the vats amounts to about 1s. per ton.

Some reduction in this cost may be expected when the price of labour is reduced. It should also be possible in the course of time to procure the cyanide itself at a somewhat lower figure; reduced railway rates would also affect its cost of trans-

port. The much disputed question of royalties for patent rights might also in time be brought to favourably affect the cost of working.

It is very doubtful, however, if cyanide itself can be manufactured within the country more economically than it can be in Europe. From these figures it will be seen that, exclusive of royalty, the cost of cyaniding and milling are about equal.

(To be continued.)

MINING IN THE UNITED STATES.

Copper in New Mexico.—The Vulcan Mine in Montana.—Glauber's salts in Utah.—Gold extraction without mining.—Progress in Nevada.—Plumas preening.—The diamond fields of the United States.—Sissy Raids.—Mr. Edison as a maker of diamonds and gold, and as an epitaph writer for women in general.

(FROM OUR OWN CORRESPONDENT.)

NEW YORK CITY, DECEMBER 1.

IN the present flourishing condition of copper mining, a good deal of wonder has of late been expressed as to why a very famous New Mexico property is not being worked. Ore on top, bottom, and all sides is what a person can see in the vast mines of the Santa Fé Copper Company at San Pedro. Great ledges of glistening copper are in bodies too large to estimate. Experts are bewildered, and acknowledge themselves unable to calculate, with any reasonable accuracy, the number of tons in sight ready to be taken out. Some venture 500,000 tons as the probable amount. Others place their estimate as low as 200,000 tons; but all agree in saying that it is the biggest and best paying proposition they have ever seen lying idle. These mines have not been operated for about three years. Why they have been allowed to lie idle is a mysterious story. One thing is certain—they were not closed down because they were unprofitable. It is rumoured, and the report seems to have good authority, that they will soon be started up again. When this is done new machinery will be used in the reduction of the ores of a capacity of not less than 250 tons daily, and it is estimated that the minimum net profit will be \$144,000 per annum. The property comprises a dozen claims, with mill site and machinery. About 25 men are employed by the company now, but when under operation the pay roll will probably carry from 500 to 700 men, besides a great number of teams. When this comes San Pedro will take on new life, which indirectly will serve to encourage other mining enterprises, and stimulate all lines of trade in southern Santa Fé County.

The Vulcan Mine, in Montana, which has been idle for several years, will probably start up in a few days, and a large number of men will be employed. It is definitely known that preparations are being made by the owners of the property to start up the mine probably in December. Even at the present low price of silver, it is stated that the Vulcan Mine can be operated profitably. All the machinery at the mine is still in place, and is in good condition. Some additional machinery will be purchased of the latest and most approved pattern, and the present shaft will probably be sunk another 100 feet. The Vulcan is a silver property and a good producer, and was one of the properties closed down when the price of silver declined. It paid big dividends for some years, and though it cannot any longer be considered a bonanza, it is said to be a good property, and one that will pay dividends to the stockholders if properly managed. It has been an open secret among mining men in the City for some time that the Vulcan would resume after election, no matter which way the election went, as it was known that the mine could be made to pay, at any rate, as long as silver remained even at its present price. It is said that the company has been reorganised on a new basis that will insure its continued operation for a long time to come.

Great Salt Lake, Utah, has for several years been furnishing a good part of the surrounding country with salt. Lately the salt company, while driving some piles, discovered a stratum of sulphate of soda, or glauber's salt, with a slight mixture of silica, which can be easily separated. It is claimed that there is sufficient quantity to make the discovery of value. Most of our sulphate of soda comes from Europe.

A Philadelphia paper states that it is reported on good authority that a large company has been organised to promote a system of gold mining without removing the ore from the earth. The scheme as applied to gold mining is to sink shafts a few inches apart, and pump into them a suitable solvent. A strong electric current is then to be passed through the soil between the shafts. The action of the electric current is claimed to be that it will carry with it the dissolved gold from one shaft to the other, and deposit it there on any metallic circuit in the same manner as electro-plating. The successful mining of sulphur in what is called a somewhat similar way in Louisiana is quoted as giving some reason for thinking the gold mining scheme feasible. But the case is very different. In Louisiana the valuable deposits of sulphur are covered with quicksand, and many unsuccessful attempts have been made to reach the sulphur. The attempt was made to freeze the quicksand, and for this purpose a giant refrigerating plant was set up, but without success. Then a Cleveland inventor offered the proposition to sink a 4 inch pipe, and inside of this a 2 inch pipe, and to melt the sulphur by forcing down steam under pressure and allowing it to expand at the bottom of the well, and pumping out the molten sulphur through the small 2 inch pipe, as is done in certain salt wells worked on a similar plan. This scheme worked successfully and is now in operation, sulphur 99 per cent. pure being obtained, which is allowed to cool in vats and afterwards cut into suitable blocks.

Good progress is being made in Nevada. The Gold Creek Mining Company is developing placer properties in the Island Mountain district, 80 miles north of Elko. They are employing 150 men and 100 teams, put to work during the last three weeks, and are daily putting on more. They are constructing a storage reservoir that will hold 3,000,000 gallons of water enough for five months run in the driest of seasons. A great deal of the ground being mined goes from \$5 to \$25 per cubic yard, and the average is 60 odd cents.

The old Dixie Mine, in Tuscarora, which has been idle for the past four years, recently fell into the hands of Salt Lake men, and is being developed into a fine property. They have erected cyanide plants and mills, which are now running night and day. The company has recently purchased the adjoining ground called the Carice, paying \$30,000 for it. There are other gold properties under bond in the district, and altogether Tuscarora is enjoying a gold mining boom which is based upon an actual gold output.

In Western Nevada at present, for some reason, more attention is being given to placer than to vein mining. This is pro-

bably because at a small cost for machinery sufficient gold to pay fair wages may be quickly obtained. In the western and central parts of Nevada are more placer deposits than was generally known to exist when all come to be looked up. Such of these as are so situated that water may be cheaply brought upon them are being worked more or less extensively. In places, however, there are large areas of placer ground, for the working of which water cannot be obtained, except at great cost. These cannot be touched, though some are very rich. In a few places, as about Osceola, there are placers so rich that they are being profitably worked by the use of dry washing and winnowing machines.

From Plumas County, California, I hear that work on the gold bar property on the Middle Feather will be prosecuted during the winter. A contract to extend their tunnel has been let by the company. The company have in contemplation the working of the present river bed and the bars where it formerly ran for a distance of several miles, between the mouths of Washington and Dogwood Creeks. The waters of the Feather River will be utilised for the generation of electric power. The plan of operations comprehends the running of a deep cut from the lower end of the bar upon which mining operations so far have been conducted to the head thereof; and when the bar has been worked the rivers may then, if deemed expedient, be turned into the cut and the river bed worked. It is the intention, however, to work the entire river bed, and each bar on the property if profitable to do so. Aerial tramways will remove the displaced earth. Should the hopes of the owners of the Gold Bar property be realised a new field will be opened for the profitable employment of mining capital in our country, as but few of the streams in Plumas, however rich, have been thoroughly mined. Besides, much gold from the hill diggings, suffered to escape by imperfect or insufficient gold-saving appliances, has for many years been finding its way into the rivers and creeks, thus increasing the stores of wealth overlooked and consequently undisturbed by the pick of the early miner.

It is not, I think, generally understood that the United States is likely enough, sooner or later, to become a diamond producing country. Records of unquestionable trustworthiness exist of diamonds having been found in Virginia and North Carolina, but the most productive State hitherto has been California. The first announcement of Californian diamonds was in 1850, in *Silliman's Journal*, and since then many genuine discoveries have from time to time been reported. The chief localities have been near Cherokee in Butte County, near Placerville, in El Dorado County, French Corral in Nevada County, and several places in Amador County. In Trinity County also some very minute diamond crystals have been found. Professor F. Woehler, of Göttingen, some years ago examined samples of the "platinum sands" of Trinity River. After removing gold, platinum, chromic iron, silica, ruthenium, &c., by the usual methods, he observed the residue microscopically, and found numerous colourless, transparent grains, which he presumed to be diamonds. Subsequent combustion in oxygen and precipitation from layta water convinced him that the microscopic crystals were true diamonds. Having regard, therefore, to the wide area of the district over which the discoveries have been made, and to the fact that the whole of this district is of a distinctly volcanic character, and even yet is covered here and there with huge masses of lava and indurated volcanic mud, it can hardly be doubted that systematic prospecting will lead to the development of productive diamond fields. Analogous conditions, with variations of local detail, are observable in Arizona. I have myself seen on the mesa lands near Pinal many spots that I pointed out to the local prospectors as highly probable to prove diamondiferous; and on the occasion of a visit of inspection that I made in 1894 to the Upper Rancheria district of Amador County, California, I met several of the men who had found some of the more noted Californian diamonds, and was shown the exact places of the discoveries. The finds all happened in washing gold from the gravel that underlies the volcanic cap, and it is a moot question whether the gems were, properly, constituents of the lower or upper formation. But that they were merely specimens of far greater numbers cannot be doubted; and any adventurous spirit who may be willing to risk a little capital on the chance of discovering a large fortune might easily do worse than to engage in diamond-hunting at Upper Rancheria. An attempt was made to interest the great De Beers Company in the matter. It was thought that, of all men, the famous Sissy Raids (as we irreverent Yankees now call your irresolute empire builder) would appreciate the importance of protecting the diamond market. But this idea proved erroneous. So the Californian communication was probably used for curl-papers, and its senders received no reply.

I am reminded of all this because Wall-street was talking yesterday, and is still talking to-day, about an article which appeared in the *New York Herald* of the day before yesterday, respecting an interview with our own particular "wizard," Mr. Edison. That versatile gentleman claims to have anticipated Professor Moissan in the manufacture of diamonds. "I succeeded," he said to the *Herald* man, "in producing infinitesimally small diamonds—diamond dust, in short. That these were true diamond crystals I ascertained by sweeping them up on a bit of lather, when I found they would cut into a sapphire. I see that Professor Moissan has succeeded in making rather larger ones. But all these experiments were with me simply a scientific pastime. The production of gold and of diamonds would be of no practical value to the world, unless, indeed, the diamonds were black. Then I'd jump at them like trout to bait. No white diamonds for me, but niggers; the blacker, the harder, and the uglier the better. That would be worth while. Black diamonds are of enormous practical value. If we could get enough of them at low enough prices, we could cut canals right through miles of solid granite. But white diamonds would be of no use to me. And if the time ever comes when white diamonds can be produced by shovelfuls in a chemical furnace, they couldn't be of any use to anybody. Not all the law-makers in the United States or in the world could make them worth more than 50 cents a peck." "Then you are not a Bryanite?" asked the reporter. "No, sir," rejoined the wizard ("laughingly, but with decision," adds the report). "And it's the same with gold. I believe it is not only a possibility, but a probability of the future, that we will discover a process of transmutating the baser metals into gold." Here the interest of your readers in the interview presumably ceases; but at the risk of being charged with not sticking to my last, I am tempted to add the following further quotation, giving the Edisonian view of the whole universe in general, and its better half in particular. "Mr. Edison," I asked, struck with a sudden idea, "how many elements are there?" "I believe," was the reply, "that all matter can at present be reduced to one of 67 elements. . . . I believe that there is one primordial element, to which all the elements we know at present are finally reducible. I believe that the discovery of this primordial element is within the possibilities of science. . . . That sex, whose chief duty is the reproduction of its kind, will be superseded as completely as automobility of the future will supersede horses. Its occupation will be gone. Careful scientists, having the dearest interest of the race at heart, will produce men, and men only. The saints of old were agreed

* A paper read before the Institution of Mining and Metallurgy.

able request that was made by the directors—namely, that the capital should be increased to £100,000, and even then, in comparison with other West Australian companies, the capitalisation would be very moderate.

Mr. WILSON asked what the working expenses of the mine had been during the last 12 months, and also the expenses of management during the same period.

The CHAIRMAN replied that he had endeavoured to make it understood that the present meeting had been specially convened for the purpose of creating additional working capital, and he had also explained that the subject mentioned by Mr. Wilson would come up on the reports which the directors expected to have ready by the end of the year, when the shareholders would be called together for the express purpose of discussing the very points that had been raised.

The SECRETARY then read the agreement.

Mr. SMITH said he was very pleased to have heard the agreement, and he thought the shareholders ought to approve of it at once. They had a very valuable property, and Messrs. Tapp and Landau must be of the same opinion, or they would not have been willing to guarantee the new issue on the terms they had done.

The resolution was then carried *nem. con.*

The CHAIRMAN afterwards moved:—“(2) That the 20,000 new shares when created be forthwith offered to the existing members of the company at the rate of £1 10s. per share, in proportion to their present share holding, and that the provisional agreement entered into with Messrs. Tapp and Landau, as now read to the meeting, with respect to the guarantee of the said 20,000 shares, be and is hereby approved and confirmed.”

Mr. WILSON seconded the resolution, and it was carried.

The meeting was then concluded.

JOHANNESBURG GOLD FIELDS LIMITED.

The seventh ordinary general meeting of the Johannesburg Gold Fields Limited, was held, on Monday, at Winchester House, Mr. R. A. Tieszen presiding.

The SECRETARY (Mr. George Christie) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen,—The past twelve months have shown us that we are still living in times in which politics have an undeniable and almost supreme influence over the welfare and prosperity of a country. The gold industry in the Transvaal, and especially on the Rand, stands to-day on the same sound footing as it did twelve months ago, and yet there is not the same eagerness of European investors to embark their savings in the development of a country which has passed recently through a political crisis. The real cause of nervousness, if there was any justification at all, has long since disappeared, but the after-effects of the crisis are very slow in wearing off. In common with all other Transvaal enterprises, our Company has suffered, not exactly any direct damage, though some of the Boer forces were for a time encamped on our ground, but it has suffered through the delay experienced in the development of one of the properties in which we are interested. You will remember that at our last meeting I was able to announce to you that a new era had dawned for this Company. We had overcome the imminent dangers which had beset our path before. We had succeeded in accumulating quite a respectable cash capital, and we had been fortunate enough to find a combination by which one of our properties—the Zivrogel Mynpacht—was to be opened up and worked with a fresh working capital of over £78,000. Well, the dangers of the past have not re-appeared. Our cash resources—about £11,000—as one glance at our balance-sheet will show you, are sufficient for all our immediate requirements. Only the result of our last move—the formation of the Cinderella Deep Company—has not yet fulfilled our hopes, and this is entirely due to the want of confidence and a general lack of enterprise on the Rand. We have circulated among you the report of the proceedings at the recent general meeting of the Cinderella Deep Company, and you will have seen from it that we have proposed the election of two directors—Mr. Edmund Brayshaw and Mr. A. A. Auret. Each of these gentlemen represent a holding of over 15,000 shares, apart from our own holding of 75,000. You will also have seen that Mr. George Albu, the Chairman of the company, strongly objected to such a course, although, for the world of me, I cannot see his reason. Both Mr. Brayshaw and Mr. Auret are thoroughly independent men, both represent large holdings, and both are very well-known men in Johannesburg. Mr. George Albu calls this an unfair interference with his control of the company. Now, this is a charge to which we in this country are very susceptible. I am no exception to the rule, and, as this is my best opportunity to reply to Mr. Albu, I must ask you to follow me for a minute or two through the figures. Messrs. G. and L. Albu hold about 60,000 shares. Mr. Brayshaw and Mr. Auret own 30,000, we (the Johannesburg Gold Field Company) 75,000, and you and I personally own 11,000. Now, if Messrs. Albu, for their 60,000, are entitled to two representatives on the Board, then I think anybody will deem that it is only right and fair that all the rest of us, holding about 118,000 shares, are entitled to at least three representatives. Mr. Albu will, of course, argue that our 75,000 shares, being so-called vendor shares, should not rank even with his cash shares, but this I cannot admit for one moment. If we had thought the best policy was to sit on our property, to let it rest idle, we could have done that very well without Messrs. Albu. We gave Messrs. Albu a very considerable interest in our property, for what? What was the consideration Messrs. Albu gave for it? They didn't pay us any money! They guaranteed the working capital of £78,000, and received a bonus of £25,000 shares for so doing! Working capital is intended to work, I suppose. They were not even alone in furnishing this working capital. They had partners; our shareholders, and I among them, contributed part of it. Mr. Brayshaw and Mr. English took over a whole third of their guarantee, and now Messrs. Albu call it unfair if we, the Johannesburg Gold Fields, or even their partners, Mr. Brayshaw and Mr. English (through his representative), claim a voice in the administration of the company. No, gentlemen, that is not unfair. You must not for one moment think that there is any serious difference of opinion between ourselves and Messrs. Albu. It may very well be that the policy to delay yet awhile the development of the Cinderella Deep ground is the best, because we may be able to commence work in earnest may not all be traceable to the general want of enterprise on the Rand, but if that is the case, we want to have that on the combined authority of such men as Mr. Brayshaw and Mr. Auret (the representative of Mr. F. A. English), and not on the sole testimony of Mr. George Albu. I have more than one reason for saying this, because it would appear from the reports published that ground in our immediate neighbourhood is becoming more and more sought after, and we hear a large area of land, 306 claims, about equal to our own ground near to us, and certainly not more favourably situated than our own, has so recently as October last—and mind, in these days of depression—been formed into a company, with a capital of £50,000, of which the working capital of £135,000 is guaranteed at 30s. per share. This is the Angelo Dip Company. This proves that other people take not a despondent view of affairs on the Rand. I will not say more for the moment about our Cinderella Deep shares, but shall come back to them when I sum up the present position of our company. I must say a few words about our other property, the Rietfontein mine. You know how very disappointed we all were in the old days of this company, when we found that the gold reefs traversing this property seemed so good. We have so far not been able to reverse our former opinion about the non-payability of these reefs, but if I tell you that for it, gold reefs or no gold reefs, I think you will agree that this is a piece of good luck and good management not often experienced. You know that we for years patiently devoted ourselves to tree planting, and we have now 400,000 trees in the ground. We have of late gone in for fruit trees, so that, I think, this spot will shortly be one of the most attractive near Johannesburg. We have excellent water on the farm, and the distance from Johannesburg is not great. Johannesburg is a town which can only extend in one direction, that is, to the north, towards us, because east, west and south is all gold mining ground, with

machinery, and no end of dust. Already people have begun to build villas and suburban residences near to our boundaries. Of late we have had public sales of building land in the direction of Rietfontein, and this building land has fetched at Rouville and Rosebank £85 to £120 per acre. The board is contemplating laying out a township on our land before long, or we may let or sell small pleasure farms of four or five acres, and, if we realise anything like the price other people have obtained for their ground, we shall do very well indeed, and we shall get back with interest the money we originally paid for the property. A low valuation at the present moment puts the value of the ground in question at £75,000, and that does not take into account our valuable plantations, which, I think, we might safely put down at some £40,000 at present, but which in a few years will be worth double or treble that amount. Now, to sum up the present position of our company, I will say the following: You all know that we, as directors, have nothing to do with the market quotation of our shares, but I hold that it is one of the most paramount duties of directors to furnish such information to the shareholders as will enable them to form an approximate idea of the value of their holding. The issued capital of this company is £235,000.

I have just shown you that an approximate valuation of the Rietfontein ground at the present moment, with its tree plantations, will give you fully 10s. a share. In addition to this, we hold 75,000 shares in the Cinderella Deep Company, and I have told you that similar ground in the same position, and of the same extent, has been capitalised at double our figure, and that these shares are guaranteed at 30s. per share. I think you may take it that this will be a moderate estimate of what we shall eventually realise for our Cinderella Deep shares, without counting on any inflation of prices on the Rand, because I am speaking in times of depression. This would give you another 10s. per share, so that, in my opinion, our Johannesburg Gold Fields shares must in time be worth par. If this should come to pass, and our shares be quoted at par, and if this company, which a few years ago was hopelessly involved, and was saved from ruin only by personal advances made by the directors, should become worth a quarter of a million sterling, then, gentlemen, we—I am speaking for myself and my co-directors—shall consider that we have accomplished one of the most difficult, one of the most arduous, and one of the most successful tasks we have ever undertaken. I now beg to move the adoption of the report and accounts. (Applause.)

Mr. P. COMISKEY seconded the motion.

The report was then adopted, Mr. Steward alone dissenting.

Mr. COMISKEY proposed the re-appointment of the Chairman as a director, and Mr. Morton, in seconding this, intimated that he was thoroughly satisfied with the explanation that had been given with regard to the directors' remuneration.

The resolution was carried unanimously.

The auditors, Messrs. Cooper Brothers & Co., were also re-elected, and, on the motion of Mr. Little, a cordial vote of thanks was passed to the Chairman and directors.

The proceedings then terminated.

HANNAN'S STAR GOLD MINES, LIMITED.

The second ordinary general meeting of shareholders in the Hannan's Star Gold Mines (Limited) was held on Tuesday last, at Winchester House, E.C., under the presidency of the Right Hon. the Earl of DONOUGHMORE, K.C.M.G.

The SECRETARY (Mr. Holland Dell) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—The details furnished in the report afford complete information regarding the financial position of the company at the date the accounts were closed. The amount of working capital provided when the company was initiated was £15,000, which amount, I am pleased to tell you, has been fully paid up. When we became fully aware of the expenses to be incurred in connection with the development of your property in Western Australia, we considered it desirable to add to the funds provided for this purpose by the issue of some of the reserve shares. 3020 shares were sold from time to time through the company's brokers at a premium. These shares realised about £4300, which sum was added to the working capital, making 19,300 in all available for this purpose. Sundry creditors, mentioned in the balance-sheet as amounting to £1800, is made up as follows:—The principal item is an amount of £850 for a 16 nominal horse-power condensing engine and boiler, which has not yet been shipped, but which will be utilised to drive our crushing machinery, and there is also an amount of £500 due to persons on the other side for mine supplies; the remainder is made up of small items. As you will see by the accounts, £5303 has been spent in respect of plant and machinery. The principal item in this account consists of a Caird and Rayner condenser, which was sent out as soon as we heard that water had been struck in our property in order to render it available for drinking purposes, and to avoid the expense of purchasing and carrying water from the local condenser for supplying the miners and our staff with water. We have sent out a complete winding and pumping plant, which we believe is now being erected at the main engine shaft. This consists of a 16 horse-power compound geared winding engine, and 16 horse-power boiler, a pit head frame with the usual cages, kibble, trucks, wire rope, and rails. There is also a steam pump, capable of lifting 4000 gallons per hour, with the necessary steam and delivery pipes. There is erected and paid for and in working order in Donoughmore's shaft a winding engine, a wooden pit head frame, and the necessary cages and trucks. The mine has also been provided with tools of various descriptions for carrying on the work. The freight, carriage, and custom dues upon our machinery have cost us £1271 14s. 9d., which is much less than we should have had to pay under ordinary circumstances. The transport of the machinery from the port in Australia was, however, delayed as long as possible, and we were enabled to send a large portion of it by means of the railway to Southern Cross. The rest went on later to Coolgardie by the same means. The details under development of mines are complete, and include the cost of the mine workings as shown upon the plan accompanying the report, and as mentioned in the manager's report. The other items in the accounts need no explanation from me, as they are shown in detail. You will, however, notice that on August 31 the amount of working capital unexpended was £5438. At the present time, after meeting the mine expenses for September, October, November, and December, there will be a balance of about £1000 remaining in hand. The manager's report shows the work which has been done upon the property during the past year, and I think you will agree with me, that the prospecting and exploration of the property has been effected with considerable vigour. I would state here that, as a result of the work done, the Boulder Main Reef, which, in the southern portion of our property—owing, I believe, to disturbance of the ground there—has not opened up so favourably as we expected, has, nevertheless, in the workings in connection with James' shaft, exposed a very satisfactory state of affairs. The lode is being rapidly developed at this portion of the property, and has a width of 8 feet, and the last letter from the mines' superintendent, dated October 27, estimates the average value for this width to be equal to from 1½ to 2 ounces of gold per ton. He further states that its value appears to improve as the drifage advances north, and that very rich ore exists in the lode, as shown by the assays which he obtained from two samples, one from the hanging wall, which assayed over 12 ounces per ton, and one from the footwall portion, which assayed nearly 15 ounces per ton. What would be to you, however, as it is to your directors, the source of greatest satisfaction, is that the average value of the ore is satisfactory, and which, we believe, is capable of being worked at a profit. The results obtained warrant the vigorous development of the lode, and as additional working capital is required for this purpose, and for the purpose of providing suitable crushing machinery to enable us to realise the value of the ore now being exposed, your directors have been considering for some time the most suitable means for obtaining this additional working capital. Your directors wished, if possible, to avoid the necessity of asking the present shareholders to provide

this sum, and I have much pleasure in stating that we have entered into a provisional arrangement, which, whilst it enables these shareholders who wish to do so to participate in providing funds to complete the development of what is recognised to be a very valuable property, we have been able at the same time to ensure the necessary support should the shareholders not wish to do so. We, therefore, propose to increase the capital of the company by the creation of 40,000 new shares, which will make the total capital £120,000—by no means large for a company having our prospects—and to issue 15,000 of these shares immediately. These shares are to be offered at par *pro rata* to the present shareholders. To those who subscribe this issue there will be given the right, at any time up to December, 1897, to apply for one additional new share for every two which may be allotted to them in respect of this first issue of £15,000. We have been able to arrange with responsible parties to guarantee the whole of this issue at par in consideration of the right to subscribe at par for the balance of the unissued capital now being created, and 6d. per share brokerage. I have now fully explained both the reason why new capital is required and the means by which it can be provided, and I hope to submit a special resolution to you at the extraordinary meeting to be held immediately at the close of this one for that purpose, which, I hope, will receive your cordial support. Before sitting down I have much pleasure in moving—“That the directors' report and accounts as presented to the shareholders be and are hereby adopted.” (Applause.) The Chairman read also the following cablegram, which was received on Saturday:—“Main engine shaft has reached a depth of 71 feet. It is well timbered, and the shaft station at this level has been prepared. Levels south from James' crosscut have been driven 25 feet on the lode. The level north has been driven 22 feet. The average width of the vein is 8 feet; the average yield per ton 1 ounce 5 dwts. This does not include selected samples. Number of tons of ore on dump, 500.”

Mr. J. H. CORDNER JAMES, in seconding the motion, went at some detail into the present position at the mine, describing fully its state at the various workings. In the original instance, he said, they had expected that the ore opened up by the underlay shaft would have been sufficiently plentiful to have paid large dividends. On development, however, it was found that, though 200 tons estimated by the manager to yield over 3 ounces to the ton had been added to the dumps, the ground was not of such a character as to warrant them in continuing the work. Attention was then directed to Donoughmore's shaft, which was being sunk with a view to cutting the ore in depth, and in which it was expected that the work would be vigorously and rapidly carried out. This shaft was sunk 100 feet in excessively hard diorite, and at that depth they made a crosscut and cut a lode formation. Afterwards they decided to sink another 75 feet in ground which turned out to be a little softer. At this depth a crosscut was continued, and, according to cable information, a lode formation, 3 feet wide, had been cut at a distance of 120 feet. It was also stated that water issued freely from the face of the crosscut. When rich ore was discovered in the adjoining property of the Boulder Main Reef Company, the mine superintendent was instructed to prospect the northern portion of the property, and the James' shaft was sunk and the Boulder main lode running 8 feet wide, and going from 1½ ounce to 2 ounces to the ton, was discovered by a crosscut, extending to 244 feet from the shaft. With this deposit and a good water supply, such as was at the company's service, he felt sure that the property would prove remunerative.

Mr. ESPY, one of those who originally pegged out the property, said that he had refused offers of over £3 each for his shares, and he felt sure that the mine would yield rich ore and become handsomely remunerative.

The CHAIRMAN, in answer to a SHAREHOLDER who criticised several items in the accounts, explained that the company was bound by law to keep a business agent in the colony, and the sum paid by the company for that purpose seemed to him a very moderate one. The directors' fees were only £100 for each director, with an additional £50 for the Chairman, and he certainly thought that he had earned that sum. (Hear, hear.) The sum entered for cablegrams might appear a considerable one, but it was absolutely necessary to be in constant communication with the property.

The motion for the adoption of the report and accounts was then put and carried.

On the motion of Mr. S. JAMES, seconded by Major JEBB, the auditors, Messrs. Ford, Rhodes, and Ford, and Messrs. John Mann and Son, were reappointed.

An extraordinary general meeting was subsequently held, when, upon the motion of Lord DONOUGHMORE, seconded by Mr. LAPAGE, the following resolution was unanimously carried:—

That the capital of the company be increased to £120,000 by the creation of 40,000 new shares of £1 each, and that the directors be and they are hereby authorised to allot such shares to such persons and on such terms as they think fit.

A hearty vote of thanks to the Chairman terminated the proceedings.

UNITED RHODESIA GOLD FIELDS, LIMITED.

The ordinary general meeting of the shareholders in the United Rhodesia Gold Fields (Limited) was held on Tuesday, at Winchester House, E.C., Sir GEORGE W. R. CAMPBELL, K.C.M.G., presiding.

The SECRETARY (Mr. G. H. St. Hill) read the notice convening the meeting.

The CHAIRMAN said: Ladies and Gentlemen—Though matters have improved, and are improving, this is nearly as cheerless and dull a time for South African directors and shareholders to meet each other as can well be conceived. Nevertheless, we are obliged to meet before the close of the year. Your company was incorporated on December 11, 1894, with a nominal capital of £750,000, of which the working capital was £225,000, all subscribed without going to the public; 660,900 shares, fully paid, have been issued up to date, and 89,100 are held in reserve. Your company took over the whole assets of Frank Johnson and Co., together with some very valuable properties belonging to the Zambesia Exploring Company, the Bulawayo Syndicate, the Copenaghen Company, the Exploring Land and Mineral Company, the Bambesi Syndicate, and the Northumberland Syndicate. For the Frank Johnson assets which we took over, with certain of their liabilities, as they stood, we paid that company share for share—namely, 200,000 £1 shares in our company, and for the assets of the other companies just named, we paid them 230,000 £1 shares, they finding £130,000 of the capital. Your company thus came into possession of several large groups and areas of some of the most promising mines and lands in Rhodesia. Our lands and building sites are extensive and valuable, and our mining claims are in such well-known districts as Victoria, Hartley Hill, Panhalanga, Lomagundi, Mazoe, and Umfall, and some of them have been very favourably reported upon by Mr. Hammond and Mr. Robert Williams. With such assets we were naturally not anxious to acquire further properties at any considerable cost. We did, however, in June, 1895, obtain a concession from the British South Africa Company of 300 square miles of land north of Zambesi, carrying all mineral rights. What the value of this concession is no one can yet say, but we have made a provisional arrangement for its development by a proposed large company which possesses a still more extensive grant. We have naturally had no very recent reports regarding the country north of the Zambesi, but we know that last year some companies were formed, and others were in course of formation, to develop that country, and that these companies had obtained concessions to the extent of at least 1600 square miles, in addition to coal areas of at least 12,000 acres. As regards the progress made in the development of our company, the first year's work consisted in great part in taking over the numerous and widely-scattered, and, in some instances, imperfectly defined properties of Frank Johnson and Co. In February, 1895, we formed our first subsidiary company, the Central Panhalanga Gold Mining Company, with a nominal capital

of £130,000. To this company we handed over 65 of our claims on the Panhalanga range, receiving in return 29,866 fully paid shares of £1 each. These shares, together with the 29,593 which we subscribed for, I trust will turn out a valuable asset, for we have recently received favourable accounts of the mine. Its engineers have lately returned to their local duties, being among the first to resume such work. This has been our only flotation, though, but for the serious circumstances of the country, we had hoped for several others. The only course open to your directors was to watch events, and pending the resumption of active work to cut down to a minimum all expenditure that could be reduced. An expedient to effect further economy and obtain other advantages has been brought prominently before them by their managers and engineers—namely, an amalgamation with the Bulawayo Syndicate. This proposed amalgamation was urged on the grounds that the economy in standing charges, which is so necessary to conserve the working capital of both companies until operations in Rhodesia can be successfully and economically resumed, could be best effected by the combination of two or more companies of good standing and ample working capital. Accordingly, an approach was made by our directors to the directors of the Bulawayo Syndicate, and met with a favourable reception, as it did also from the holders of the majority of the shares in the companies. Many meetings were held, and it was agreed that as the Bulawayo Syndicate with its excellent standing has a much smaller nominal capital than that of the United Rhodesia Gold Fields, the latter should be merged in it, and that a fair basis for the amalgamation was that the shareholders of the United Rhodesia should get one Bulawayo Syndicate share for every two of their own. (Cries of "Shame" and "Disgraceful.") This basis was arrived at from a comparison of the cash in hand and assets of the two companies, and of the market price of the respective shares at the date of the negotiation. The Bulawayo shares at one time stood at 90s., whilst the United Rhodesia Gold Fields shares have never risen above 31s. 3d. I may mention that to-day the Bulawayo Syndicate shares stand at 22s. 6d., whilst our shares stand at 10s., such prices, I need not say, being much below the intrinsic value of the shares. (Hear, hear.) In the event of the amalgamation taking place, it is a stipulation that a right which Mr. Robert Williams, as founder of the Bulawayo Syndicate holds for himself and his heirs in that syndicate so long as it should exist—namely, a right to 10 per cent. of all its profits—shall be commuted to 15,000 fully-paid shares in the amalgamation company, and on the other hand it is also stipulated that in the event of the amalgamation the 54,584 United Rhodesia Gold Fields shares at present held by the Bulawayo Syndicate shall be cancelled. I may mention here that three of your directors, who sit on both boards, did not vote when it was resolved to recommend you to amalgamate, though they acquiesced in the judgment of their brother directors, their managers and engineers, and their principal shareholders. The amalgamation has been urged on the grounds that both companies would save money by having only one board of directors at home and one local board, one set of managers and consulting engineers, one staff and one set of offices, and that certain of their properties being contiguous could be developed more cheaply. Having given a list of the assets owned by the two companies, the Chairman continued: By casting together our lots we should be averaging the value of our properties in Matabeleland and Mashonaland, and we should possess immense areas throughout Rhodesia, and, probably, be able to float many subsidiary companies. Considering that all experts have pronounced the country to be highly ariferous it would be very strange, indeed, if we did not discover some valuable mines. And I need not remind you that the discovery of even a very few good mines would repay all outlay many times over. We who have embarked our fortunes, or part of our fortunes, in South Africa have had our patience tried, and may have tried still, but the brunt of the crisis has been borne by our countrymen and countrywomen in South Africa. They have acquitted themselves nobly, and among them stands out conspicuously the figure of Cecil Rhodes. But, in the opinion of those most competent to judge, the worst of the troubles are all over, and the others are passing, and Rhodesia will again offer a favourable field for our money and our enterprise. I beg to move the adoption of the report and accounts.

Mr. A. J. MACPHAIL seconded the motion, and explained the items which appeared in the accounts.

Several SHAREHOLDERS complained of not having received a profit and loss account, and of the meagre nature of the accounts presented, and, ultimately, with the concurrence of the directors, an amendment was carried, adjourning the meeting till January 15, the shareholders in the meantime to be supplied with accounts up to September 30.

The extraordinary general meeting which had been convened to consider the amalgamation scheme was also adjourned to the same date.

A vote of thanks to the Chairman concluded the proceedings.

BULUWAYO SYNDICATE, LIMITED.

The annual ordinary general meeting of the members of the Bulawayo Syndicate (Limited) was held on Tuesday, at Winchester House, E.C., under the presidency of Sir GEORGE W. R. CAMPBELL, K.C.M.G.

The SECRETARY (Mr. W. Milne) read the notice convening the meeting.

The CHAIRMAN said: Ladies and Gentlemen—For some time you have had in your hands your balance-sheet and the report of your directors and manager. I shall now give you briefly—principally for the benefit of such of you as have not had shares in the company from its beginning—an account of the rise and progress of your syndicate and of its assets. The syndicate was incorporated on November 18, 1893, with a nominal capital of £12,000. It was formed chiefly to purchase farms and claims granted to the volunteers who were engaged in the first Matabele war, and within a month of the formation of the syndicate many valuable interests were acquired at a very low price. The idea of this syndicate and its work, and all its earlier and indeed later operations, originated with Robert Williams, our consulting engineer. On January 30, 1894, the nominal capital was increased to £40,000, and Messrs. Barnato Brothers and other powerful groups took a large interest in the syndicate, an additional grant of 100,000 acres of land being then obtained. At this time Mr. J. H. Hays Hammond became associated with Messrs. R. Williams and Company. With the additional working capital available, further interests were acquired, and the development of certain of the claims was vigorously undertaken. On August 8, 1894, the nominal capital was increased from £40,000 to £50,000, in order to give the Consolidated Gold Fields an interest in the syndicate, and thereby strengthen it. In December, 1894, the syndicate was interested in the formation of two companies—namely, the United Rhodesia Gold Fields (Limited) and the Brand-Grey Syndicate, and derived considerable profit from both these transactions. In February, 1895, proposals were received by the board for the absorption of the Copenhagen (Mashonaland) Company, the Northumberland Mining Syndicate, and the De Beers Prospecting Syndicate, for a total of 39,000 of our shares, and on April 9, 1895, the purchase was approved, and the nominal capital of the syndicate was further increased to £150,000, at which figure it stands to-day. 122,300 shares were issued up to October 31, 1895, the date to which the report is made up. In November, 1895, the shareholders received a bonus of 25 per cent. on the subscribed capital. The accounts show that we still hold in liquid assets a sum of £45,584, besides shares in the United Rhodesia Gold Fields and other African companies to the value of £28,892. The syndicate also owns practically 771 mining claims, with the right to peg out an additional 330,400 acres of land, coal, areas, town stands, and other interests. This, I think you will admit, is not an unsatisfactory position for a syndicate which came into existence only three years ago with the small capital of £12,000. With regard to the year which has just closed, we entered upon it with the fullest hope of a continuance of our satisfactory record. In March last your board were busily engaged in arrang-

ing for the flotation of our Hartley Hill claims in conjunction with other companies having interests in the same district, and matters were nearly ripe for the formation of the proposed company when the Matabele rising took place, and arrangements had to be suspended for the time. It may be mentioned also that your board have been in negotiation with the boards of other land-owning corporations, with a view to the formation of a company to deal exclusively with land and town stands in Rhodesia, and it is hoped that before long these negotiations may be brought to a successful issue. Our consulting engineer, Mr. Robert Williams, will shortly return from South Africa, and our manager, Mr. George Grey, is now here. I trust that our consultations with these gentlemen will result in a vigorous and successful course of operations in Rhodesia as soon as possible after the present rainy season is over. These operations will not be confined to mines alone, but will include the establishment of farms and native colonies to work them, the planting of trees, &c.; the latter being matters in which Mr. George Grey has taken a great interest, and been in close touch with the administrator, Lord Grey. To go into more detail, your assets are, roughly, as follows:—Cash and liquid assets, £44,584 0s. 11d.; gold claims, principally in Matabeleland, 771; gold claims, right to peg out, 330; land, principally in Matabeleland, 447,060 acres; 13 coal farms (6000 acres each) on the Gway River, right to peg out two other farms, plumbago beds (50 miles from Salisbury), a nitrate of potassium field (100 miles from Salisbury), house, stable, and stand in Bulawayo, four town stands in Victoria; United Rhodesia Gold Fields, 54,584 shares of £1 each, fully paid; Williams's Consolidated (Limited), 2500 shares of £1 each, 10s. paid; Argus Printing and Publishing Company (Limited), 150 shares of £1 each fully paid. Now, ladies and gentlemen, when I have said the little I have to add, we shall ask you to adopt the report and balance-sheet. The secretary will read to you for your votes the resolutions on the notice which has been for some time in your hands, and we shall be happy to answer to the best of our ability any questions you may be pleased to ask us. Our kinsfolk in Rhodesia and we South African shareholders have for a long time now been passing through a very dark and stormy period; but, in my opinion, brighter times are at hand, and the rebellion and the rinderpest, in giving Rhodesia the roads and railways so sorely needed years sooner than it would otherwise have had them, may prove to have been a blessing in disguise. There are still, it is true, scarcity of labour and food and transport, and consequently exorbitant charges. These are being met and provided for, and even now two great companies are being organised—one for the dispatch on a large scale from England to South Africa, and to Rhodesia in particular, of provisions and goods of every description, and the other for the speedy and efficient transport of such goods, as well as of passengers. Altogether, we have every reason to hope that 1897 will turn out a much brighter and happier year than 1896 has proved itself. Gentlemen, I propose:—"That the report of the directors and auditors, and the statement of accounts for the year ending October 31 last, be and the same are hereby adopted." (Applause.)

Mr. JAMES MURRAY seconded the resolution.

A SHAREHOLDER drew attention to an apparent discrepancy in the report regarding the number of claims held by the company.

The CHAIRMAN said that the difference in the number of claims was, in the first place, accounted for by the fact that the Little Bellingwe and the Deffiance had never belonged to the syndicate, but had been included by a mistake. The second reason was that several claims had been abandoned.

Mr. WILLIAMS explained that, although the company had abandoned worthless claims, the licenses were still preserved, and these could be used to take up further claims which might be considered valuable.

The resolution was then put and carried.

Mr. BLAKEWELL proposed that the remuneration of the directors should be £2000 for the current year. The work had lately been of a very anxious description, and the directors had given them before a bonus of 25 per cent., which was the only bonus he had yet received from any Rhodesian company.

A SHAREHOLDER seconded the motion.

Mr. MAY thought it would be well to defer fixing the directors' remuneration until the shareholders saw the results of the current year's working. He would, therefore, move as an amendment that the question of the fees should stand over for the present.

Mr. BUNBURY seconded the amendment, which was carried.

The retiring directors (Messrs. James Murray and J. Goldsmith Procter) having been re-elected, the auditors (Messrs. Frith and Clarke) were also reappointed.

An extraordinary general meeting of the syndicate was then held, to consider the question of amalgamating with the United Rhodesia Gold Fields.

The CHAIRMAN explained that the meeting was called in view of the proposed amalgamation with the United Rhodesia Gold Fields, but that company having adjourned the consideration of the matter, it would be well to follow the same course.

Mr. WILLIAMS said the meeting of the United Rhodesia Gold Fields was adjourned so that the shareholders might have sufficient time to consider the matter of the proposed amalgamation. They also wished to have some further particulars with regard to the accounts. He believed there was a large majority of the shareholders of the other company in favour of amalgamation. The great reason for amalgamation was that the companies might be able to work together in unison in Africa. The properties of various companies which were distributed over wide areas adjoined each other in several of the districts, and there would be considerable advantage in regard to labour and other matters. They would be able to have more efficient management in the several districts, instead of having isolated properties. Then, again, they could send out batteries to the districts, which would be able to deal with the ore of the groups of mines. The available capital would be also increased by an amalgamation of the two concerns, and altogether there were innumerable reasons in favour of the course which had been proposed.

The meeting was then adjourned, and the proceedings terminated with a vote of thanks to the Chairman.

NORTHERN TRANSVAAL LANDS COMPANY (LIMITED).

The ordinary general meeting of shareholders in this company was held on Monday, at Cannon-street Hotel.—Mr. Sydney Thompson presided, and remarked that as their farms were mostly in the northern districts, they had not suffered any direct loss from the invasion of the Transvaal by Dr. Jameson. The indirect effect of the raid on the company had, however, been very serious. It had postponed the commencement of the railway from Pretoria northwards for at least nine months, and, as a consequence, the demand which was at the time springing up for land had dropped off. They had also had to deplore the outbreak of the rinderpest, which had swept away the cattle from a number of their farms. The rinderpest would, however, probably be a blessing in disguise, inasmuch as it would lead to the development of the country by railways. One of the greatest difficulties to the construction of railways hitherto had been the opposition of the Boers who possessed oxen. Now that their oxen had perished they felt the need of railways for transport purposes. The board had decided for the future not to let any of the company's farms except at a money rental. In the past they had taken in payment of the rent a percentage of the produce and cattle. An agreement had been entered into with the Transvaal Exploring Company, granting them the right to prospect on this company's farms for about two years. They were to receive, as a consideration, 500 fully-paid shares in the other company, and in the event of a company being formed to take over any of their land, they would have one-third of the capital and a minimum of 7s. 6d. per acre. He concluded by moving the adoption of the report.—Mr. E. F. B. Fuller seconded the motion. The report was adopted, and a vote of thanks to the Chairman terminated the proceedings.

LINOTYPE COMPANY, LIMITED.

An extraordinary general meeting of the shareholders in the Linotype Company (Limited) was held on Monday, at the Cannon-street Hotel, to confirm the resolutions for the recapitalisation of the company.—Mr. JOSEPH LAWRENCE (the Chairman) presided. The SECRETARY (Mr. William H. Lock) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—It is my formal duty now to move the resolutions which have just been read by the secretary. They were submitted, as you are all aware, to a full meeting of the shareholders of the company on November 19, and were unanimously passed by that meeting. Now, it is only necessary for me, in two or three words, to sum up the position regarding this recapitalisation scheme. We propose by this scheme to create a capital of £2,000,000 sterling, £1,000,000 being preferred shares and £1,000,000 being ordinary shares, which will take whatever balance of arrears the company may obtain. The capital to-day stands at £1,100,000; £980,000 of that is in ordinary £5 shares, £100,000 in 6 per cent. preference shares, and £20,000 in 1000 founders' shares of £20 each. At the first meeting (a meeting of the founders) a scheme was agreed to, and confirmed subsequently by the shareholders at £5 shares of the new company—namely, £200 in preferred shares and £200 in deferred shares. The ordinary and preference shareholders were to get for every (say) 100 shares that they held in the present company, 140 shares in the new company, consisting of 70 preferred shares and 70 deferred shares. Some shareholders who securities of the company and in the market would be that the shares would decline in price—that is to say, that by increasing the nominal capital of the company, their shares would decline in market value. Well, I have had some particulars taken out, which will deal with that point specifically. Already the Stock Exchange has been dealing, for some days since our last meeting, in the new securities, and the middle price on Saturday, which is not the highest figure—in fact, it is somewhat smaller than the figure on one or two previous days—is that the preferred shares of £5 each are already selling for £6—that is to say, 20 per cent. premium. The deferred shares of £5 each are selling for £7 6s. 3d., or 46 2/3 per cent. premium. (Applause.) Consequently the holder of 100 of the old ordinary shares, who gets under the new scheme, if you finally ratify it to-day, 140 new shares, consisting of 70 preferred and 70 deferred, would get securities worth, at Saturday's market price, £931 17s. 6d. So, practically, for each of his 100 shares, he would be entitled to £9 6s. 4 1/2 per share in money. At the time the scheme was proposed to you the ordinary shares were then selling at £8 10s., so that the fears of that shareholder who thought that the shares would go down in price have not been borne out, because the old shares are worth nearly £1 a piece more to-day than they were then. (Applause.) The effect of the new reconstruction in the case of the 40 deferred shares, of a nominal or face value of £400. The market price of those shares to-day is £532 10s., whereas the selling price of founders' shares on the day the reconstruction scheme was introduced to your notice was £400. Now, already the wisdom of the policy of reconstructing and readjusting our capital account, and doing away with these several conflicting interests amongst the proprietors, has been extremely beneficial to the company, and extremely beneficial to each of the shareholders individually and collectively. The next step is the Stock Exchange special settlement and quotation, and already the brokers of the company, aided by other large brokers in the House, have signed the necessary papers, and have applied officially to the Stock Exchange Committee, first, for a special settlement, and that will be followed immediately by an application for an official quotation of our securities. If we can get that—and there is every reason to believe we can get it—we shall then start the New Year with our securities officially quoted on the Stock Exchange, and the company will in every sense be in a prosperous condition. I have only formally to move the resolutions.

Mr. BEMROSE seconded the resolutions.

The CHAIRMAN, in reply to questions, said the proposal was in its essence a compromise, because they were endeavoring to pay the founders a sum which would commute, not only the present, but the prospective benefits which they were entitled to get from the company by way of earnings—the prospective benefits which might accrue to them if the company had gone on as it was going on now. As he said then, and said still, he did not think that the actuary was living, or the business man existed, who could possibly, with mathematical accuracy, determine at what point that commuted figure should be fixed. They must not pay the founders out at the market price of the day. That would be obviously unfair, and so they used a middle figure between what they thought they had reasonable ground for stating, that they believed they were earning now and what they might be earning five or seven years hence. Unless they had dealt with the founders in a liberal spirit, and unless they had met shareholders in a reasonable give and take spirit, it would have been impossible to have come to an agreement with them, and the company would have been left with an uncertain element in its finances which would have operated in a matter undoubtedly detrimental to the company. He assured them that the directors, and he, believed, a great many large ordinary shareholders, thought that, on the whole, they had made an extremely advantageous bargain for the shareholders, and unless there were other strong reasons shown he thought that they would always remain convinced that they had made a good bargain with the founders.

Mr. WHITWORTH said there would be a time (which the Chairman stated at the last meeting to be when they got £100,000 profit) when there would be a great gain to the ordinary shareholders in dividend, and a loss to the founders in dividend in consequence of this conversion. The statement he made, and which was a fact, was that the directors did not at the meeting of the founders, and the effect of that was an alteration for the benefit of the founders' shares. Therefore, he asked if the Chairman could tell him at what point, so far as dividend was concerned, having regard to the alteration in the scheme, the new terms would put them on the same footing.

The CHAIRMAN, in reply, stated that the figure would be a little higher than under the proposal originally made to the founders, but what they lost in dividend they would gain in the enhanced value of their shares. As to the date from which the dividend should accrue on the shares of this new company, they had carefully thought it out, and taken the very best legal and other advice they could take. There was perfect continuity in the business of the company, and the conversion would take place from the passing of these resolutions, because the new company would probably be registered at the same time, and they would also pay—just in the same way as if there had been no reconstruction—the dividends in March, and would because they would have their meeting early in March—and would immediately afterwards declare the dividend in the ordinary way. They had fully provided in the agreement for the sale of the new company for the shareholders to have the benefit of any profit that had been earned by the old company, and they would get a dividend in the ordinary way next March in the same way as they did last year.

The resolutions were then carried unanimously. A vote of thanks to the Chairman and directors concluded the meeting.

The directors of the ZEEHAN-MONTANA have declared a further interim dividend of 1s. per share in respect of the £1 further paid shares, and proportionately in respect of shares partially paid, making a total distribution for the year of 15 pence. Dividend warrants will be posted on the 31st inst.

LAGUNAS SYNDICATE, LIMITED.

The first annual ordinary general meeting of the Lagunas Syndicate (Limited) was held on Wednesday, at Winchester House, Old Broad-street.

Mr. ROBERT HARVEY (the Chairman), in moving the adoption of the report, referred to the great loss the company had sustained by the death of Colonel North. Several influential shareholders considered it was unnecessary to carry forward so large an amount as £52,000, and had expressed their desire to have a dividend. As the company was making good profits the board had decided to recommend the payment of a dividend at the rate of 4 per cent. (Applause.) He, therefore, proposed the adoption of the report and the declaration of the dividend.

Mr. GEORGE FLEMING seconded the resolution.
Mr. CREW asked for information as to the dispute in Chili?
Mr. YULE enquired if the debenture issue was fully registered in Chili, and recognised by the authorities there.

The CHAIRMAN: I am sorry there are not more questions asked, as I was under the impression from the paternal care shown to the shareholders' interests by the gentlemen who sent round a circular that there would be many questions asked, and I could not understand the action of any shareholders in sending around such statements, which would so materially tend to prejudice the interests of the shareholders had they not been here contradicted. You will agree with me that it is advisable, generally, to allow matters in the Press to pass unnoticed—unless one has a newspaper and a good journalist at one's back. But, as this company has not that as one of its assets, we are obliged to allow all the observations in the Press to pass unnoticed, unless it is an absolute libel on the directors, and to await the general meeting in order to explain any matters that may be raised. I think that is the proper way to proceed. The decision will remain with you, and you will express it by rejecting or accepting the balance-sheet and report. Now, with respect to the lawsuit on the grounds, for administrative reasons I must decline to enter into details, but I must tell you this. I presume all the shareholders have had the circular containing the article which appeared in a financial paper on December 2. To begin with, we have in the second paragraph the following statement:—"Owing to the abnormally low prices ruling during the first year of our working, very small profits were made, but during the last five months the prices were fairly remunerative, and left a profit of over £52,000." Well, that is about correct. You are all aware, or most of you, perhaps, who are associated with machinery and undertakings of this description, that the first few months are generally worked at a disadvantage. It takes time to get the material in working order; consequently, the production of nitrate during the first 12 months is rather at a high rate, and you are all aware that the prices realised for nitrate were abnormally low, consequently the profits made during the whole of that 12 months were only about £2000, whereas a little over £50,000 was made during the following five months. When nitrate reached a very good price, and we got into a normal course of working, we produced nitrate at a cost which, I think, compares favourably with any china or nitrate works in existence. The writer goes on:—"From this it appears that the stated profit of £52,000 was all made in the last five months of the period. What has become of the profits—small though they may have been—of the first year? It may be intended to convey to the reader that the figure given covers the profits for the whole of the 17 months. 'It does,' but, if so, the report is very badly worded." Well, I am very sorry if it is badly worded. We thought it was worded in a common-sense manner, and that the shareholders generally would understand it.

The next passage reads as follows:—"The limitation of output as arranged by the Permanent Nitrate committee gives the syndicate's works a quota of about 100,000 quintals per month, which is being made at a very low cost, and is being sold at a good profit." Well, that is satisfactory enough so far as it goes. I do not know how far they want it to go; it only went five months, and we could not go beyond five months in June. We are eight or nine months on now, and in the same ratio. (Applause.) With respect to the issue of the debentures, when the company was formed we expended all the money, and then we had not completed the machinery; we wanted £186,000 more to pay for the completion of the machinery. We had a certain amount of money in cash, and by the issue of £150,000 debentures we were placed in funds, and we have erected valuable works and machinery, which cost over £304,000. That accounts for the issue of debentures, and I may say that had it not been for our personal friends we should have had very great difficulty in issuing the debentures, because at that time the price was low and nitrate was somewhat under a cloud, through the efforts of some misguided gentleman, probably, and the public generally would not have taken up the debentures. However, Colonel North, myself, and Mr. Lockett succeeded in getting these taken up, and by the assistance of Mr. Welbore Ellis also, for which we are very thankful. That explains the matter of the debentures. The writer goes on to say:—"The profits for the 17 months amount, as we have seen, to £52,000, but it is not proposed to distribute any portion of this sum, but to carry it to the credit of profit and loss. The reason assigned for this somewhat extraordinary proceeding is the pending litigation between the Lagunas Nitrate Company and the Lagunas Syndicate (in liquidation), and on this subject the directors condescend to give a little further explanation. They state that the action of the Lagunas Company against the old syndicate is for a rescission of the contract of sale and for damages, and that the present company took over from the said syndicate all its assets and liabilities. They add that the defendants claim an indemnity from the new syndicate. This, then, is the reason for the non-distribution of profits. What, however, is not stated is that the Lagunas Nitrate Company is proceeding personally against the directors of the old syndicate, and that four of those directors are on the board of the new concerns." Now, I must say this remark was somewhat of a factor in our action in proposing this dividend to you to-day, to convince you that we do not wish to defend ourselves with your money. We were under the impression at one time that it would be inadvisable to pay this dividend, not because we wanted money to defend the lawsuit, but that it would be reasonable and good working to place ourselves in a strong position with regard to working capital. I may tell you with reference to the four directors on the board who are still in this litigation that those gentlemen hold more than one-half this company's shares. (Applause.) Those four directors are in duty bound to look after your interests and their own, and I may tell you that I hold here proxies for 130,000 shares. Consequently, I can carry this meeting as I please—(applause)—but I will not take advantage of my position to win a vote on this matter of dividend, and it shall be for you to decide. But, please, eliminate from your minds that we wish to have your money to defend the action. As we are all solid men, we can respond to any damages which may be cast against us, and do not wish you to bear our burdens in any possible way. (Applause.) You are aware that this action was commenced by private individuals against private individuals, but by a general meeting of the Lagunas Company the shareholders took on their own shoulders the responsibility of action of these private individuals; but we have not asked you to bear our expenses. The circular goes on:—"In whatever way the pending litigation, which involves a very large sum of money, results, this strikes one as an indefensible proceeding, and we trust that it will be thoroughly discussed at the approaching meeting." That is what I want—for it to be discussed, and I may say that an intermediary used his good offices on behalf of the Lagunas Company, the plain company, and came to a friend of ours, offering or suggesting an amalgamation. He suggested that we should join interests, and so do away with the lawsuit. In order to avoid further litigation and unless expense the idea was not repulsed, although we own two-thirds and the Lagunas Company only one-third. It would be a matter of serious consideration as regards the valuation, but after having consulted on the matter—and here I may tell you that we must not take the probability of losing the lawsuit as a factor in any desire to amalgamate—unless it were

desirable for business purposes I advised my colleagues that we had better stick to our own property and let them stick to theirs. (Applause.) The writer of the article says that there is a lawsuit for nearly all the grounds but 16 estacas. It implies that if we lose the lawsuit, we should only have 16 estacas left, but the lawsuit is for 332 estacas over and above our 548, and that is the *suppression veri* which I complain of. There is a lawsuit for the restitution of so many estacas, but that is over and above these—we have over 800 estacas inside our grounds. (Applause.) Now, in this case the plaintiff is a foreign Government, the Government of Chili, and for me to enter into any details with respect to this matter would, I think, be most unadvisable. (Applause.) But I can only tell you this, that should we win the lawsuit, we shall be exceedingly well off; should we lose it, it will only make a difference of 10 estacas to us. Now, I think that is such a trivial circumstance that it need not for a moment upset your equanimity. With respect to the registration of the bonds the lawsuit has gone in our favour; we have won the appeal, and the deed has been registered, and when I applied for a quotation on the Stock Exchange I, in common with every Chairman when similar quotations are applied for, made an affidavit that the deed had been registered, as our cablegrams and letters advised us that it had been registered. To my surprise, and the first time in my experience, I received a letter from the secretary of the Stock Exchange saying he would like to see certified copy of the register of that deed. That is a unique circumstance, I think, and one which has never occurred before. I am sorry to have taken up your time, but I suppose these are the vicissitudes of being the Chairman of a company. I am sorry that there is always somebody to minister to a mind diseased in sending about documents of this description. But be assured the directors of this company are working with honesty and fairness in your behalf, and will continue to maintain and show a bold front in carrying out your interests in every possible way. However much we may be harassed and worried, we shall stick to our duty, and carry it out in a fair and honourable manner. (Applause.)

The resolution, on being put to the meeting, was carried with one dissentient.

Mr. WELBORE ELLIS then proposed that the meeting should be adjourned for a month, and to appoint a committee to consider the matters referred to in the report, and the general position of the company.

Mr. YULE seconded the resolution, which, on being put to the meeting, was lost by an overwhelming majority.

The retiring directors and auditors were re-elected, and a vote of thanks to the Chairman and directors closed the proceedings.

TATI BLUE JACKET SYNDICATE, LIMITED.

The third annual general meeting of the shareholders in the Tati Blue Jacket Syndicate (Limited) was held on Wednesday, at Winchester House, E.C., Mr. THOS. M. THACKERWORTH presiding.

The SECRETARY (Mr. N. Claydon) read the notice convening the meeting.

The CHAIRMAN, in moving the adoption of the report and accounts, said the profit and loss account showed that there had been an expenditure in Tati and London of £6020. Since June 1611 tons of ore had been crushed, yielding 617 ounces of gold, or (say) £2200, and credit for this would be taken in the current year's accounts. The balance-sheet showed the authorised capital to be £120,000; 92,347 shares had been issued. There was a liability of £1 per share on 20,347 shares, which was now nearly all paid. There had been spent for the property to date, including machinery, plant and buildings, £53,770; the battery erection account came to £6112, the stores at Tati and in transit represented a value of £8339; live stock, movable property and office furniture were valued at £1245, sundry debtors and bank and cash balances amounted to £25,071, and the expenditure on the mine amounted to £23,418. The company had now in hand an available working capital of about £20,000, and there were 27,653 unissued shares. The property consisted of 1390 claims, 1000 of which were held under special agreement with the Tati Concessions, and had an area of 3435 acres; and 390 claims were held under the local laws, having a total area of 803 acres. The syndicate also had 10 machine areas and water rights, altogether 1000 acres. More than half the claims had been taken up since October last year. 500 were acquired by purchase from the Tati Concessions, being alternate claims, and by this purchase the blocks of claims of the syndicate became continuous on the reefs. A 10 head battery was erected and working at Tati, and there was a hauling engine at the New Zealand Mine. A large quantity of machinery, including a 20 stamp battery, was on the way, and was stranded between Mafeking and Tati owing to the want of means of transport. Mining had been chiefly confined to the New Zealand and Ver Maaks reef. Towards the end of 1895 a little work was done on the Arab, Durham, Ver Maaks East Extension, and Blue Jacket. Since April last all work had been confined to the New Zealand Mine, the breakdown of transport rendering work outside of Tati impossible. Mr. Schloesser's report gave full details of the work done during the year, and his views upon the prospects opened up. The directors did not consider that these prospects were at all satisfactory. Mr. Francis, one of the directors, who had had great experience in mining, was requested to inspect the mines, and form his own opinion of their condition and of the work which was being carried on. Mr. Francis called in Mr. H. A. Piper, the manager of the Matabeleland Development Company, who visited with him the New Zealand, Ver Maaks, and Blue Jacket properties, and confirmed his opinion. A great quantity of machinery had been ordered, and sent out at great cost, which would not be required for a long time to come. The directors had little doubt that the whole of the machinery which they had purchased, and which they did not at present require, could be disposed of without any loss. Ten head had been erected at Tati, and certain crushings of ore had been made there. It was the intention of the board to erect 20 head of stamps at Ver Maaks reef immediately after the 10 head had been erected at Tati, and then to add the 30 head, the order for which was stopped, making altogether a 50 stamp battery at Ver Maaks. No portion of the 20 stamps had been erected. The mine was now temporarily in the charge of Mr. Evans, who was for a short time Mr. Schloesser's assistant. Although much time had been lost and outlays made which might have been postponed, the directors were glad to learn from Mr. Francis that he considered the syndicate had a good property, which, with proper management, would repay the shareholders for the present disappointment. Even if the properties especially referred to should turn out to be worthless, which they were far from believing, they constituted less than one-fourth of the syndicate's property. They had working capital in hand and unissued shares, and they intended to do their best to prove that they had got a valuable property.

Mr. A. ROBERTSON STEELE seconded the motion.
The motion was unanimously agreed to.
The retiring director (Mr. D. Francis) and the auditor (Mr. Frederick Whinney) were re-elected, and a vote of thanks to the Chairman and directors concluded the meeting.

CASSEL GOLD EXTRACTING COMPANY (LIMITED).

At the annual meeting, in Glasgow, on Wednesday, of the Cassel Gold Extracting Company, Mr. Carson (the Chairman), in declaring a 5 per cent. dividend, payable in African Recovery shares, said that the adverse decision in South Africa had been unexpected. They could hardly realise how, with a case so strong, a decision adverse to their patents could have been arrived at, but the British colonies would be governed by the judgment of the Court of Appeal in London. The treatment the Cassel Company had met with from first to last was an object lesson to inventors, and showed that the more valuable a patent was the less likelihood there was of the patent being maintained.

WHEEL GRENVILLE MINING COMPANY.

A general meeting of the shareholders in the Wheel Grenville Mining Company was held on Thursday at the offices of the company, No. 7, Union Court, E.C., Mr. F. G. LANE presiding.

The SECRETARY (Mr. William Stirling) read the notice convening the meeting.

The accounts showed a balance against the mine at the last meeting of £232. The tin sales have been 263 tons, which realised £9761. The total debits on the general account were £10,908; including labour costs, £6479; merchants' bills, £2139; lords' dues, £393; London office rent, secretary's salary, &c., £55; committee's fees and expenses of meeting in Cornwall, £78. The balance against the mine was £731 10s.

The agents' report was as follows:

The 248 fathom level east of Gould's engine shaft on the south part of the lode is 7 feet wide and well defined, and worth £13 per fathom. But as we consider there is another part of the lode standing north of the present level, we are putting out a crosscut with the object of proving the same, but have not yet reached it. The 232 fathom level east of Gould's is worth £20 per fathom. The 220 fathom level east of Gould's is worth £13 per fathom. The 262 fathom level east of Fortescue's engine shaft is worth £17 per fathom. The 245 fathom level east of Fortescue's is worth £12 per fathom. The 225 fathom level east of Fortescue's is being driven by a boring machine, and although at present is only producing low quality tin stuff, it is showing signs of an early improvement. The 235 fathom level east of Fortescue's is worth £10 per fathom. The 178 fathom level east of Fortescue's is worth £9 per fathom. The 165 fathom level east of Fortescue's is worth £8 per fathom.—Stops. There are two at the 248 fathom level worth £14 per fathom each. There are three at the 248 fathom level worth on an average £12 per fathom each stop. There are two at the 232 fathom level worth £11 per fathom each. There is one at the 225 fathom level worth £10 per fathom. There is one at the 223 fathom level worth £11 per fathom. There are two at the 205 fathom level worth £2 per fathom. There is one at the 165 fathom level worth £10 per fathom.—Tribute. There are 20 pitches working by 68 men, tributes varying from 10s. 6d. to 13s. 4d. in the £. Number of persons employed is 495.—Chas. F. Bishop, Jno. Bishop, Stephen Williams.

The CHAIRMAN said: Gentlemen—I regret the absence of our Chairman, Mr. R.W. Gould, from the meeting to-day, but I hope he will soon recover from his indisposition, and that he will again be with us in a very short time. Before proposing the reception of the accounts and report I will just go through the figures in as clear a manner as possible, so that there may be no difficulty in coming to a decision as to passing the same. We began the 16 weeks' account with a balance against the mines of £232 14s. 11d. Our labour costs for the first month and merchants' bills amounted to £2417 17s. 10d., for the second month £2474 4s. 5d., for the third £2419 12s. 3d., and for the fourth £2636 16s. 3d., making a total of £10,148 10s. 9d. Then we have lords' dues £393 3s. 7d., secretary's salary, office rent, and committee's fees and expenses £134 9s. 10d., making a total altogether of £10,908. On the other side we have the sales of tin, 263 tons odd, which realised £9760 10s. 10d. Taking the merchants' bills and labour costs together, as against the sales of tin, the loss on the quarter amounts to £347 19s. 11d. Then there is the debit balance brought forward from the last account of £232 14s. 11d., and the lords' dues £393 3s. 7d., and the other item of £134 9s. 10d., which makes a total of £1,008 8s. 3d. We have, however, received a sum in respect of overpaid income tax, when we were in a more prosperous state, of £376 13s. 3d., so that the balance against the company for the 16 weeks amounts to £731 10s. You will also perceive that there is a loan which we had from our Chairman of £1000, and I will explain the occasion of that directly. Passing on to the report, which is now before you, it is one which I cannot say but that it has caused us a little disappointment. However, all our ends are at the present time, with the exception of one, producing a very fair amount of tin. The one which, I am sorry to say, is not in such a prosperous state as we could wish, is the 248 fathom level east of Gould's. Unfortunately, in driving the level from which we expected very great results we met a horse of granite. This granite we found on the north part of the lode, and through it the lode was cut off—or, rather, the tin-bearing portion—and this reduced the returns very considerably. We had hoped that it would only be a temporary affair, and that by crosscutting a short distance to the north we should have passed out of this granite. Hence the committee decided on the reports we had from our agents that it would be hardly necessary to look upon our accounts in a despondent mood, and we deemed it prudent to prevent what we have not had the opportunity of doing for many years past—that is, to make another call on the shareholders. Therefore, our Chairman offered us a temporary loan of £1000 without any interest for two months, in the hope that we should cut the northern part of the lode at the 248 level, from which, as I have previously said, great results were expected. We were fortified in accepting the offer by a letter from our manager of November 3rd, wherein he said:—"If that lode had turned out as it did in the level above it would have been no trouble for us to have got from it an extra 10 or even 20 tons of tin." Well, only an increase of 20 tons, extended over the two months from November till now, would have met the deficiency in our accounts that are now presented to you. Therefore, we considered it prudent to accept Mr. Gould's offer, more especially as on November 19 our manager wrote:—"I am pleased to inform you that we are getting some branches in the 248 crosscut, which would indicate that we are nearing the north part of the lode. I may say that we have driven the whole of the crosscut in elvan, in which we have discovered during the last two days several small branches of strong-looking tin, which would lead me to hope that something of value may soon be met with. We have drawn two parcels of stuff, which have assayed 1½ to 1½ per cent. for tin. This is the produce of the whole stuff coming from the crosscut, although no defined lode is yet seen." Under these circumstances, I think we were fully justified in not giving notice to the shareholders of a call, and we do hope that in a very short time from now we shall be enabled if not to work off the deficiency to, at all events, make a better account than is presented to you to-day. In a letter received this morning the agent says:—"Nothing as yet in 248 crosscut, which is still in elvan. Up to the present it is dry, but I am glad to say the machine end of the 225 fathom level east of Fortescue's is improving, and is now worth £14 per fathom. We may expect a fairly good run of tin ground in this level." Well, for our disappointment in the 248 level we shall quite be able to make up from the improved appearance of the lode in the 225. In the 225 the result up to the present time has been comparatively poor, but it seems that we have now got a very good lode indeed. I am not at all despondent as regards the 248 crosscut. I believe that if it is continued a little further, we shall yet meet with the lode. Although we have driven some 10 or 12 fathoms, still there is a possibility of meeting with the north part of the lode which has been, and is, the ore-bearing part throughout the mine. Now, I think that this will be a sufficient excuse for our taking the loan instead of adjusting, as has always been the case, and is really the correct thing to do in Cost-book mines, the accounts at the end of the quarter. During the 16 weeks under consideration our average cost, including bills, has been £2537 2s. 8d. per month, as against £2578 14s. 5d. in the previous three months. It shows that we have made a small saving in the cost. On the other hand, however, the average price of tin during the 16 weeks has only been £37 17s. 6d., as against £38 5s. 2d. in the preceding quarter, and £40 5s. 9d. in the corresponding quarter of last year. Well, that is a very poor state of affairs as regards the price of tin, and the question is what is the best thing to do? It is no use for us to go on working the mine with the anticipation of a great rise in the price of tin to meet the current expenses. Our aim I think should be to increase the returns, and to do this we must have more development work done. We have had a very good offer made to us by a firm of eminent engineers in Cornwall. They are manufacturers of machinery, and they have offered us drills for a certain time to put in our various levels to open them up quickly. To do this, however, we must have the means at our command. These means we cannot have in our possession unless we make calls upon the shareholders. I do not think it would be right to make calls upon the shareholders in our present position, unless we could get some assistance from our lords. It is no use our lords receiving

their dues and the shareholders paying them, unless more active development on our concern takes place. There is no possibility that I can see at the present time of forming the company into a Limited Liability one, whereby we should acquire an amount of working capital. Still, if our lords would grant us some assistance—we mean some substantial assistance—we might then be able to go, not only to our shareholders, but to the public as well, terms that would be favourable to all concerned. The mine in the past has been a very good mine, and there is no question about it that our returns are satisfactory as far as they go; but the price of tin is too low for us to meet the expenditure. Therefore, the only course open is to endeavour to increase our output; and that, as I have said before, requires capital. That capital, I am afraid, however, we shall not be able to get unless we have some substantial assistance from the lords. Probably we may obtain that assistance, but there has been no encouragement up to the present time for us to believe that we shall. I do not think that I can say anything more in explanation of the accounts, or of our report, but I shall be very happy to hear any remarks that the shareholders present may have to make, and if there is any explanation I can give you, I shall be very happy to do so. I beg to move "That the statement of accounts now presented, together with the agents' report, be received and adopted."

Mr. GULLICK seconded the motion.

Mr. JOLLY said the Chairman had given them a very lucid explanation of the accounts, but he was sorry he did not hold out any hope of an improvement in the next quarter.

The CHAIRMAN: Well, the only hope that I can hold out of an improvement in the position of the affairs of Wheel Grenville is the raising of working capital to develop more quickly. If we are placed in the position that we can drive our levels faster, there is no question but what we could bring the concern into a prosperous state, but as I said before I do not think the shareholders, from what I have heard, will be so ready in finding the necessary funds without assistance on the part of the lords.

The resolution was carried *unanimously*.

The CHAIRMAN: There is only one more resolution to propose. It has been a trying time for our manager and agents, who have done their utmost to reduce the cost to the least possible amount without, however, reducing the labourers' wages. We are quite satisfied that we are getting full work for the money that is paid. I would not force the agents on any account to reduce the cost, and thus make the working arrangements inefficient. Our miners are getting very fair wages, and we are satisfied with the work that they do, and our agents are giving the utmost time to efficiently develop the mine. Therefore, I think that, coming from the shareholders, a vote of thanks to them will give them every encouragement to continue the perseverance and energy they are now exhibiting. I am happy to propose "That the best thanks of the meeting be given to the manager, parser, and agents for their continued care and persevering energy in working the mine."

Mr. JOLLY seconded the motion, and it was agreed to.

A SHAREHOLDER moved a vote of thanks to the Chairman, and also wished to express the gratefulness of the shareholders to Mr. Gould for the loan he had made to the company.

The CHAIRMAN, in reply, said he was sure no one had bestowed more attention to the affairs of the company than Mr. Gould. The meeting then terminated.

AFRICAN BANKING CORPORATION, LIMITED.

The 12th ordinary general meeting of the shareholders in the African Banking Corporation (Limited) was held on Thursday, at the Cannon-street Hotel, E.C., Mr. EDWARD WEBB (Chairman of the corporation) presiding.

The SECRETARY (Mr. Alexander Duncan) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—When we last met, six months ago, on the occasion of the ordinary general meeting, there were a good many clouds hanging over South Africa—political disturbances, native rising, and the drought and rinderpest—but, notwithstanding all these troubles, the bank seemed to thrive. On the present occasion matters to a certain extent are the same, but in a very mitigated form, with the exception of the rinderpest, and we are still, I am glad to say, managing to get on tolerably well. Our earnings have increased, the net profits are £28,000 this half year as against £24,000 in the previous half-year. We propose to pay the same dividend as before, placing £10,000 to reserve, and carrying forward the same amount as before, which is about £5000. The accounts which are before you are very simple, and need but extremely few remarks to explain them. The reserve, you will see, is £15,000; note circulation, £81,000; current accounts and deposits, £3,682,000, or £600,000 more than they were on March 31 last. The drafts and acceptances amount to £450,000, or £93,000 more than they were in March. On the assets side the coin in cash is £1,390,000; securities, £223,000; bills of exchange, £1,195,000, an excess of £476,000 over the last account; and bills discounted and loans amount to £1,639,000, or an excess of £346,000. The bank premises and furniture are very much the same as they were before. The profit and loss account shows a gross profit for the half-year of £59,000, which is more than the last one. The charges on the other side are £31,000, which are less than before. The amount carried to reserve this time is £10,000, to the Staff Guarantee and Savings Fund £2000, leaving a balance of £12,456, which provides the dividend and the amount to be carried forward. Among the items of debit in the profit and loss account for this occasion you may have noticed the sum of £2000 for staff guarantee and savings fund, and, as it is the first appearance of the kind, I ought to give some explanation of it. When the bank was first started, it seemed apparent in the interests of all—both of the institution and its employees—that instead of leaving the fidelity guarantee of the officers to be provided by outside insurance companies, it was better for the bank itself to undertake them, and to form at the same time the nucleus of a savings fund. To this end our employees contribute 3 per cent. upon the amount of their salary to the fund, and the bank—that is, when the directors think the prospects justify their doing so—similar amount. The fund thus created guarantees every officer a fixed amount according to his salary and position in the bank, and in the event of any loss repays it. Thus it is the interest of every officer not only to keep straight himself, but to take care that no other officer defrauds the bank, because if such a thing happens it is made good out of the fund in which he himself is interested. We think this a very valuable feature of the scheme. (Hear, hear.) It also acts as a savings fund account. Every officer is credited with the amount of his subscription, and the subscriptions of the bank itself are carried to the same account proportionate to the sum subscribed by the members. In the event of an officer leaving the bank after 10 years' service he will receive the whole amount which stands to his credit; if under 10 years only the amount which he himself has contributed—that is, providing he is not dismissed for fraud or dishonesty. Hitherto the directors have made no contribution to this fund, exercising their discretion in the matter, but now they think the time has arrived to make a substantial contribution, and hereafter to pay a sum half-yearly of (say) £500. The reason for fixing the first contribution at £2000 was that the fund does not become operative until £5000 has been subscribed. Your employees have now subscribed about £3000, and, therefore, this £2000 of the directors puts the fund in working order. Thus, by the joint efforts of the bank itself and the officers the former is guaranteed against all loss by peculation or dishonesty, and the latter, after a period of faithful service, will each have a substantial amount to their credit unless it has been treasured upon by dishonesty by either themselves or their colleagues. There is another matter on which I should inform the shareholders, which I think they will consider entirely satisfactory. When the bank was first established, six years ago, 100,000 shares were offered to the public for subscription. Only 59,000 shares were taken up, as matters financially did not

look very bright at that time. However, as you know, the bank has been successful, and the balance-sheet, as you will see, adds up to 4½ millions. The directors now think that it is time we established ourselves on a firmer basis, and, therefore, they have made arrangements with certain parties to take up 10,000 shares at par firm on December 31, and also 10,000 shares more on 30th June next, giving to these same gentlemen the option to take 20,000 shares besides, if they desire them, on the same terms, before June 30 next. If the option is availed of as well as the shares taken firm the capital of the company will then be raised to a million, with £500,000 paid up. This we think will be none too much, we are quite sure we shall be able to employ the money profitably, and that the credit of the bank would be advantaged by having a larger capital. (Applause.) In no other country in the world than South Africa could such a succession of misfortunes be experienced as have been during the year now ending without bringing down business to a minimum, and having more injurious effects; but, I think at the same time, that anyone watching the state of affairs must be surprised to hear how very little the country has suffered, and how quickly it has recovered. In the Transvaal, where there was an actual state of war for a short time, succeeded by a great deal of distrust, and yet mines have actually worked through without stopping. They are now doing more than before, with every prospect of doing more again. Property, which usually falls in disturbances of that kind, is now higher than it was, and I think will probably rise higher still. In the Transvaal the Volksraad now seemed disposed to assist the development of the mines instead of, as formerly, to rather set itself against them. They have lately removed troublesome restrictions and also improved regulations for native labour. In Rhodesia the native rising is suppressed, but, of course, the country has received very considerable check, and will take some time to recover from it. Our branches at Bulawayo and Salisbury have not been able to do anything for some little time, but we have laid the foundations of the business from which we expect to profit as soon as matters settle down. The most serious matter at this moment is the Rinderpest which broke out amongst the wild game in the northern districts, and has been advancing steadily south. It has already swept down through Rhodesia, Bechuanaland, the Transvaal, and the northern part of Cape Colony. By isolation and cattle police attempts are being made to check it, but so far with rather indifferent success. Our own experience some 30 years ago in this country enable us to realise the great difficulties in dealing with this terrible scourge. All transport by ox wagons is now suspended, and, of course, causes a great deal of loss and inconvenience, because it takes both time and money to supersede the ox wagon by the mule and donkey. However, it will have this one great advantage, and that is it will very much stimulate the construction of the railroads upon which alone a country so large as South Africa can be really opened up. The railway from Cape Town to Bulawayo is now being rapidly laid. The rails have already passed Gaborone; they will be at Palanyé by next spring, at Tati in the autumn, and at Bulawayo itself at the end of the year. In the Transvaal, too, the northern line from Pretoria to Pietersburg, which has been stopped on account of the disturbance, is now being actually proceeded with. The trade returns of South Africa generally are very satisfactory, and nearly every article, both of export and import, show a considerable increase. I think, gentlemen, we may conclude that matters are rapidly straightening out, and before very long we shall have a return of prosperity. I beg to propose that the accounts, with the report of the directors, be received and adopted. (Applause.)

Mr. THOMAS RUDD seconded the resolution, and it was unanimously carried.

Mr. ATKINS asked whether the proposed further issue of shares would facilitate getting a Stock Exchange quotation.

The CHAIRMAN said it certainly would do so.

Mr. FIELD enquired whether shareholders would have an opportunity of subscribing for the new issue.

The CHAIRMAN said when some years ago a similar offer was made to the shareholders, only 315 were applied for, and it seemed now to the directors that they had no option but to follow the course they had adopted.

Mr. EWER complimented the directors and the management on the result of the half-year's working, and especially on their wisdom in increasing the reserve fund.

Mr. WILLIAMS thought the shareholders ought to be very much obliged to the board for arranging this new issue, and moved a cordial vote of thanks to the Chairman and directors, which was unanimously passed, and the meeting separated.

THE PARRAL CONSOLIDATED GOLD AND SILVER MINES, LIMITED.

The ordinary general meeting of shareholders in the Parral Consolidated Gold and Silver Mines (Limited) was held on Thursday, at Winche-ter House, E.C., the chair being occupied by Mr. DOUGLAS W. WALKER.

The SECRETARY (Mr. J. C. Masters) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—You have no doubt thoroughly studied the report and accounts which accompanied the notice of the meeting sent to you, which has just been read by the secretary, and it will, perhaps, be simpler for the present to take them as read, as is usual on these occasions. When we had the pleasure of meeting you last year, there was, in our opinion, good reason for holding out a prospect of the company being in a profit-earning position in a comparatively short time. I must hold myself to a great extent responsible for putting forward such an optimistic view of the outlook at that time, and you will very naturally expect from me a reasonable explanation of the delay which has taken place, not only in the completion of the mill, but in our arriving at a state of things indicating that we are in sight of the payment of dividends. I will do my best to show you that unforeseen circumstances only have been the cause of such delay. First of all, I must ask you to call to mind the position of affairs as placed before you last September. At that time we had bought our mill and machinery, and were having them put up as fast as possible. But the calculations of the period required for carrying out these operations were several times completely upset in a manner which defeated all our estimates. You are well aware that, even in countries where the seasons are generally very regular, the weather is sometimes unreliable. Last year the autumn rains in the district of Parral were prolonged beyond the usual time and exceedingly heavy, and the transport of heavy machinery and lumber, and the building of the foundations of the mill, and all work of that kind were consequently considerably retarded. Following these late rains there was a spell of cold weather of extreme severity for that locality, and when I was at the mine last June I was well able to appreciate the extreme difficulty and hardship which would be experienced at an altitude of 5000 to 6000 feet above sea level during frosty weather, in carrying on the work of building heavy masonry, and putting up heavy machinery, because in the galleys where such work was carried on the sun did not penetrate until 10 or 11 o'clock. It appears that before the men were fit to begin work they had to light large fires at which they might thaw themselves, for it must be borne in mind that at that time there were no dwellings on the spot, and the men had to spend their nights very uncomfortably. The climate, as a rule, is very favourable, but our building operations were hampered by very exceptional weather, which was the more trying under the circumstances of insufficient and primitive shelter from the elements. The only other important cause of delay was the fact that the milling machinery was in sections, the bolting together of which was a very tedious operation, especially when, in many instances, parts had become so rusted together that great care had to be taken to prevent their being injured. You will understand that a great deal of machinery made for that country is made in sections of 300 lbs. weight. Although at present we have a very good cart road, at the time the machinery

was ordered and manufactured we had not got a good cart road to the mines. When the mill was practically complete and ready to run, the tyres of one of the mills turned out defective, with the result that only one mill could be used. These unforeseen and unavoidable drawbacks were overcome at the end of May, when the machinery, with one mill, was ascertained that the tyres of one of the mills were defective, and new ones were ordered, but by some mistake or other, the new right rise, and consequently only one mill was capable of being worked. Of course, all these delays and contingencies have resulted in an increased expenditure in connection with the mill. During June the one mill worked intermittently, and I may say experimentally, with a view of ascertaining the most suitable kind of ore and the best treatment to be adopted for obtaining the largest proportion of the assay value of the ore at the least possible cost. With the view of assisting him in arriving at a rapid and satisfactory conclusion on the subject, Mr. Beckmann secured the services for a short time of a well recommended expert in amalgamation. This man had been employed in many parts of the North American and South American Continent in amalgamation, and his experience extended over a period of 20 or 30 years. He very soon satisfied us that we were not treating ore in the best possible manner, and after several weeks' crushing, it was ascertained beyond doubt that the amount of lead in most of the ore we had been treating made it very unsuitable and expensive to attempt to extract the gold and silver by raw amalgamation, and steps were immediately taken to ascertain what was the best form of concentrator to be used. I have now brought you up to the end of the last financial year. Since last July you will be pleased to learn that, although only one mill has been running, each month's work has resulted in a profit, and when I tell you that this profit has resulted from the treatment of low grade ore—carrying ½ ounce of gold, and 15 ounces of silver to the ton, which is about half the value of the average grade we have in the mine—from which only 60 per cent. of the assay value has been extracted, you will readily understand that with the two mills at work and the concentrators in operation, enabling us to treat richer ores of double the amount now being treated, such a profit will be realised as will satisfy you all. Meanwhile the tailings are being piled up for treatment later on. We have a very suitable arrangement in the configuration of the ground round about the mill. We have a long gully near the mill down which the tailings are run, while a channel can always be cut in the centre of it to enable the water to be run off, and the tailings can be treated later on with very much ease and economy. Within the last few days we have received a cablegram from the manager to the effect that the concentrators had arrived, and that it would take eight days to get everything in place, so that by this time everything is, in all probability, running satisfactorily, and before the end of this month we should be regularly treating twice as much ore of a much greater value than we have been doing since July, so that we may expect that a day or two after the telegram was sent concentrators and mill would be at last at work. We shall then be able to treat at least twice as much ore as we have been able to do, and of a much greater value. Before closing my remarks on the work done during the past financial year and since, I would once more draw your attention to the great value of our property. The amount of development work accomplished, and the body of ore in sight, are facts which can only be thoroughly grasped, by others than those who have experience in mines, by a visit to the mines. The further opening up and proving of the mine by sinking shafts at intervals along the veins are matters to be dealt with in the future; but if the results of such operations corresponds with what has already been demonstrated, and with the opinions of persons in the locality, who, though not interested in the property, are well qualified to judge, I can only say that the shareholders of this company will have good cause for many years to come to congratulate themselves in being the possessors of a very valuable mine. Of course, we shall require to increase our milling plant, but there will be no difficulty in doing that whenever it is found necessary. The way in which the mill has been built has left us a convenient site to have its capacity doubled or trebled if need be. I cannot conclude without saying a few words with reference to our manager in Parral. I made Mr. Beckmann's acquaintance in England some years ago, and from that time until the formation of this company I frequently heard of him through mutual friends, some of whom had known him in Mexico. Since the formation of this company and during my stay in Parral in June and July last, I have learnt to look on him as a man whose heart is in his work, and who never spares himself in any way to make a success of what he undertakes. He has had 30 years' mining experience in Parral and the neighbouring districts, and stands high in the estimation of all who know him. The affairs of the company could not have been under more reliable management. I do not think the accounts require very much explanation. If you have compared our accounts with those of other companies you will find they are much fuller in detail. The items here in almost every instance have been kept separate and not lumped, but may just run through them and explain any items which I think may require elucidation. On the debtor side of the balance-sheet you will find that we are, so to speak, largely in debt. The £1684, which is down as due to the manager, conveys rather an incorrect view of the matter. That amount is the indebtedness of the company at that time in Parral, for which, of course, we are responsible. But since then this has been nearly wiped out. The loss account is what the directors have advanced to finance the company and to carry it through. The debentures speak for themselves. On the other side, you will see that we have not much cash in hand, but as money was required it has always been found. The mine stands at the same value as before. The development works have increased in value, though not very much, because they have been suspended until the mill was ready and the concentrators had arrived. You have now got the full cost of the mill, which comes to rather more than we expected, but from reasons, by which I have accounted for the delay, you will readily understand that this has been unavoidable. The buildings at the mine are very suitable. We have not got such accommodation for labour as we should have liked, but that can be increased in a few months, as may be required, at a very small cost. Mining plant and tools is an item which has to appear in our statement of accounts. Stores and materials on hand at the mine are very much larger than last year, because the quicksilver cost between £600 and £700. The amount at bank has been slightly increased over last year. The amount dumped on the top of the mine has all been brought down within an easy distance of the mill. The profit and loss account shows against us undoubtedly, but it is what the auditors call a paper loss; it is not exactly money to the bad, because we are not allowed to show the ore on hand at a value beyond what it costs us to raise. The ore and bullion account is not such a large one as last year, because we did not do so much development work, and last year we sent away first class ore, which we have not got the course of development. We do not stop; we have not got to that stage of mining yet, and, in consequence, only a limited amount—88 tons of ore against 45 tons last year—was sent to the smelters; but instead of realising £4 net we have realised £10. That is satisfactory to know, as it shows that as we go into the deeper levels the first-class ore is of a richer grade than the upper levels. Gentlemen, if there are any further particulars which you would like to have explained, not only in regard to the accounts, but also as to the mine, I shall be pleased to answer any questions on the subjects you may wish to ask. Meanwhile, I shall move the adoption of the report and accounts. (Cheers.)

Mr. J. HAY THORNBURN seconded the motion.

A SHAREHOLDER asked whether the Chairman could estimate the value of the ore on the bank.

The CHAIRMAN: We are only allowed to estimate the ore on bank at exactly what it cost to produce—viz., \$3 Mexican (or 6s. 6d.) per ton. Last year the manager, without being asked, gave us an estimate of what it would be worth if we milled it, and he put it down at an average of about £2 12s. net. The ore on the dump

is less in value than the average of the mine, some of the first class ore having been selected from it, and sent to the smelters. Speaking in answer to another shareholder, the Chairman said that the ore in the mine might be anything between 100,000 tons and 200,000 tons; but there was no doubt that the ore in sight was sufficient to last for many years to come.

A SHAREHOLDER asked what the position of the company was in relation to the debenture holders, and whether there was any danger of foreclosure.

The CHAIRMAN replied in the negative. The debenture interest had been fully met, and if any shareholder had any coupons on the bonds he could obtain payment by presentation at the Union Bank of Scotland. In regard to the directors' fees, he stated that these had never been taken. He himself had worked for four years without remuneration.

The SHAREHOLDER: At the same time, a day of reckoning will come, I suppose?

The CHAIRMAN: We are confidently looking forward to a day of reckoning. The remuneration of the directors is fixed by the Articles of Association, and it was assented to at the last meeting.

A SHAREHOLDER: Do you intend to send out cards to the shareholders when you begin to get returns?

The CHAIRMAN: We do, Sir. We have been rather called to account for not sending out information, but as a matter of fact there has been practically nothing to send out. I should like to make it quite clear on the matter of the debenture interest that the money has been paid whenever due. There has been no question about that.

A SHAREHOLDER: How many tons of ore are the mills capable of treating?

The CHAIRMAN: About 600 tons a month with the two mills.

A SHAREHOLDER: Is the second mill working now?

The CHAIRMAN: I will give you the latest information on the subject. In a letter which arrived this morning, dated Parral, November 23, Mr. Beckmann states:—"I am daily expecting the concentrators, and have everything ready to put them in place, and expect to be able to have them in operation one week after their arrival." A cable received December 2 supercedes that letter, and says:—"Concentrators arrived here yesterday. It will take eight days to get everything ready to begin work. Mine is looking well."

The motion for the adoption of the report and accounts was then put and carried unanimously.

The CHAIRMAN then moved the re-election of Messrs. J. Hay Thurnham and David W. Marwick, the retiring directors, speaking of the large interest they and their friends held in the company, and the time and attention they had devoted to its affairs.

Mr. GOODWIN seconded the motion, and it was unanimously carried.

Mr. THORNBURN briefly returned thanks. The auditors, Messrs. Woodthorpe, Bevan, and Co., were also responded.

A hearty vote of thanks was given to the Chairman and directors.

The CHAIRMAN, in acknowledging the compliment, expressed the confident hope that on the next occasion of meeting there would be a better state of affairs to present.

The proceedings then terminated.

BARIMA DEVELOPMENT SYNDICATE.

An ordinary general meeting of the Barima Development Syndicate was held on November 14, at the offices of the syndicate, 23 and 24, Robbstown, British Guiana.

Mr. R. S. BAYLEY (Chairman) said they had no regular printed report to lay before the meeting this time, simply because they had nothing from which to formulate such a document. It would be within the recollection of shareholders that, at the last ordinary general meeting, it was mentioned that the first series of blocks, comprising 14 claims, had been sold to a company which was now the Sir Walter Raleigh Mining Company of London. They were also informed that for two other series of blocks, comprising 19 and 14 claims, options had been taken by the same syndicate. Negotiations were then pending for the last series of 16 blocks. These negotiations had been concluded, and agreements drawn up by the company and the syndicate here for all three series of claims. But a condition precedent with respect to these options was that the syndicate, to the satisfaction of the company in London, should have a solid, legal title. They applied to the Government for these grants, and, unfortunately, the Government were so overwhelmed with work that it was not until September last that they succeeded in getting the grants for these claims. The options, of course, only commenced then. The first block that was sold, now the Sir Walter Raleigh, he was pleased to say, was on the high road to success under the management of Mr. Settle, a gentleman of undoubted ability and energy, who was in charge of the Transvaal Gold Mine as general manager. He took charge in July, and had certainly shown great energy in the erection of the machinery and development of the property. It would also be in their recollection that they were visited by a drought lasting from January to July. The Barima was so low that it was impossible to get the machinery to the mine. Since the rains came the machinery had been sent up, and Mr. Settle had made considerable progress, and was so sanguine of starting on January 15 that he had informed his English directorate to that effect. They had received the stock in the Sir Walter Raleigh Company, which formed the bulk of the money received from these claims which they had allotted to subscribers in their respective names. The Chairman, in moving the adoption of the report, stated that the two retiring directors, Messrs. James Winter and Luigi Palla, were eligible for re-election, and that the auditor, Mr. J. R. McLeod, was willing to serve again if elected.

Mr. CARUTHERS seconded the motion.

Mr. de JONGE said he would be the last person to try to do anything to place the directors in difficulties, but he was quite sure the board would agree that what he said was necessary. They had sold a portion of their property to the Sir Walter Raleigh Company, and certain moneys had been received and paid out, but no account of these dealings appeared in the statement of accounts before them. It was said in the Articles of Association the remuneration of the directors should be £200 a year, to be paid out of the profits, but the question was what were the profits. In the balance-sheet the property was set down at its original cost, but surely if the block of claims had been sold the value of that block should have been written off, and against that must be put the amount it was sold for, and what amount in shares they had received, as well as the commission of the directors. All these things had not been set out, or, in other words, they had not complied with Section 123 of the Articles of Association, which required that a balance-sheet should be made out, and a statement of the expenditure and receipts laid over in which all monies paid and received were clearly stated. He, therefore, moved that the meeting be adjourned in order to give the directors time to prepare a proper statement.

Mr. ANDERSON seconded.

The CHAIRMAN said that perhaps the members were not aware that the transfer of the shares was not made until after June 30, the date to which the accounts were made out. The directors had not the slightest objection to give the shareholders all the information they might require, and if Mr. de Jonge's amendment were carried, and the meeting adjourned till some future date he would take care that as full and ample

an account as possible would be made out. The directors thought that so long as they showed the balance brought forward, and what had been spent since the previous half-year, that would be sufficient.

The amendment was put to the meeting and carried.

The proceedings thereafter terminated.

MURCHISON GIFT GOLD MINING COMPANY, LIMITED.

The second ordinary general meeting of the Murchison Gift Gold Mining Company Limited, was held on Monday, at the Guildhall Tavern, King Street, E.C., under the presidency of Mr. M. Macfie.

The SECRETARY (Mr. W. Fenton Pugh) having read the notice convening the meeting:

The CHAIRMAN said: Gentlemen,—Before giving an account of our stewardship for the period covered by the accounts, which you have in your hands to-day, perhaps I might be allowed to congratulate the shareholders on the marked improvement which has taken place in the position and prospects of the Company since our last meeting, fifteen months ago. We took counsel with you in the hour of our trial, and we now have pleasure in performing the same duty on the eve, as we have reason to believe, of the prosperity of the Company. On a former occasion, when we were under the necessity of calling you together, we had made a painful discovery, and we did not desire to hide it from you. After taking every conceivable precaution that reasonable men could to safeguard the interests of the Company in the purchase of the mine, we found that we had been landed with a worthless property. We had—at least one of us—some knowledge of the gentleman who came from Australia to negotiate the sale of this property here, and we knew him to be a man of respectable antecedents. We had submitted to us most important specimens from the mine, exceeding in richness the majority of the samples that come under one's notice. We had under the circumstances to consult our engineer, Mr. Fitzgerald Moore, who is now unfortunately deceased, but who had a very wide knowledge of the mining districts of Western Australia, and he advised the purchase of that mine; but it was not until our own manager was sent out and arrived on the spot that we could learn the truth absolutely on the subject. We then, at his suggestion, employed a distinguished expert in addition to the one that he himself took advantage of there, and the united opinion of these men condemned the mine. As trustees responsible for the protection of your interests, we lost no time in acquainting you with the situation, and taking counsel with you as to future action. A mine of apparent promise was offered to us at Lake Lefroy, and you very generously showed your confidence in us by giving us power to issue £60,000 fresh capital in shares of 10s. each, for the purpose of buying and working that property, subject, of course, to the result of the inspection being satisfactory. As Mr. Emeric Tyler, one of the directors of the Murchison Gift, then happened to be in Coolgardie in connexion with the business of another mining company, we availed ourselves of his presence there to secure the services of a competent engineer to report on the mine at Lake Lefroy; but at the particular stage of development it had then reached, Captain Vaudry, who was selected to report upon the mine, and who inspected it, found no indications to justify us in entertaining proposals to buy it. But, happily, no sooner did the tide seem to ebb at Lake Lefroy than it rose in our favour at Cue. In Shakespearean phrase we took the tide at the flood, and we are encouraged to believe that it will lead us on to fortune. The manager, assisted by a first-class engineer, tested the Polar Star mine, 24 acres in extent, and both declared it to be a 3 oz. property. On the strength of this report we became proprietors of the mine. The result of operations up to the present considerably exceeds the confident anticipations we had formed respecting the property. Water was struck at 90 ft.; the main shaft has been sunk to 123 feet; 3 other shafts have gone down in the property to the water level; and these various shafts are now all connected by a drive no less than 380 ft. in length. As no battery of our own was available for treating the ore placed on the dump from the lode, upon the strength of which we bought the property, and from another rich lode which has since been discovered, we found it necessary to make use of a neighbouring mill for treatment. Before the machinery of the mill became temporarily disabled, we were able to put through 83 tons out of the 100 tons that had been transferred from our own mine to that mill, and the result was, as has been verified by letter as well as by cablegram, that there was a yield from the 83 tons of 332 ounces of gold—at the rate, in fact, of 4 ounces to the ton, exclusive of tailings, which the manager stated contained the greater part of the fine gold. Probably these tailings were treated by a plant not in all respects suitable for the extraction of gold from refractory ore; nevertheless, to the ton, in addition to the 4 ounces, happened to come from these tailings. (Hear, hear.) Several months ago the manager, who, I can assure you, is implicitly trusted by the Board, assured us that there were "4,000 tons of ore equally valuable in sight"—(I quote his own words)—and a leading journal of Cue states: "Nicer battery stone could not be seen in the district; there is a magnificent body of ore." The manager of the Cue Victory Mine, a man of distinguished repute there, who was employed at an early stage in the negotiations to inspect the mine, came forward spontaneously and reported that he "found a drive showing a nice body of remarkably rich ore, this ore body being distinct from the rich stone discovered by the prospectors, and by continuing the development of the mine at this level other rich shoots will be developed." Now, gentlemen, I have to add an item which is to us of momentous importance. To crown the edifice of our hopes and wishes a cablegram unexpectedly arrived from Mr. Carpenter, the manager, only on Saturday afternoon last, dated Dec. 5, in the following words: "Rise (that is an ascending gallery at the end of a level) 35 feet; formation in rise assays 45 ounces; assay of tailings 10 dwts. Send as soon as possible plans of battery; bills of lading send direct to Murchison Gift." Surely this latest news which arrived on Saturday is calculated to reassure even the most pessimistic shareholder that can possibly be amongst us. You will not be surprised to know that immediately before this cheering announcement the manager had asked for a 15-stamp battery to be sent. Already pumping and hauling machinery have been forwarded, and its erection will soon be completed, and the directors have arranged for a 10-head battery to be shipped immediately with boiler power for 20 stamps. Within six months this stamping plant will, we believe, be in full operation, and I trust that we may feel warranted within that period in raising the crushing appliances to 20 head. Let me hasten to add that we have paid for the mine, for the pumping and hauling plant, for the extensive and richly productive developments which I have described, without touching one shilling of the £60,000 share capital which you authorised us to raise if it were necessary. (Applause.) If the hopes foreshadowed by my statement should be realised, as I fondly believe they will, then we expect to be able to provide and erect the whole of the crushing machinery without trenching in the smallest degree on the authorised capital. We have arranged with the engineer who supplied the pumping and hauling plant to extend payment for the battery over twelve months. The first payment will not be due until June, and as we hope the battery will be erected in May, we trust we shall be able to pay for it out of the ore to be treated by it before that bill falls due. (Hear, hear.) It is for you, gentlemen, to say whether the official record we have given merits your confidence. It is hardly necessary to say that the encouraging stage of progress at which the mine has arrived has not been reached without considerable anxiety on the part of the Board as to how the formidable difficulties they have encountered could best be met. Through good and evil report, through schemes to artificially depress and schemes to artificially raise the value of the stock in the market, despite impatience in some directions, scepticism in others, we have struggled on, endeavouring to combine financial prudence with administrative economy. I have pleasure in proposing the following resolution: "That the directors' report and accounts to the 31st October 1896, be and are hereby received and adopted."

Mr. THOMAS SHARPE seconded the motion.

The CHAIRMAN then called upon Mr. Tyler, who had had the advantage of visiting the mine and of conferring with the manager, to address the shareholders and give his views of the property.

Mr. R. EMERIC TYLER: Mr. Chairman and gentlemen,—I may say that the mine is very well situated. It is only 2½ miles from Cue. When I went there we had to travel 254 miles by coach, but this is all

changed now. I believe the railway is beyond Mount Magnet, so that it will be within 50 miles of Cue, which makes a vast difference. We expect that when our machinery goes out—it will be put on board in a week or ten days—the railway will be right up to Cue, and instead of costing us some £30 a ton we shall probably get it up at the rate of £10 a ton. There is another advantage in our district, and that is that we have fresh water. The great drawback to the Coolgardie district is that the water is salt, but here it is all fresh water, so that there is nothing to block up the boilers or anything of that sort. When I visited the property I formed the opinion that it was a first class mine, but I did not anticipate that it was going to turn out anything so good as it has done. I was very much surprised to find that we had crushed up to 4 ozs., because I consider that if it crushed up to 2 ozs. it would be an excellent property. There is no reason to doubt the richness of the mine. We know that a crushing has taken place; we shall have another very shortly, and I hope it will carry the same amount of gold. We also know that we have got the money for the gold advanced by the bank out there, not that we require it, but it is the usual course. When you hand the gold to the bank they place to your credit a certain amount; therefore, we are satisfied that everything is quite right. (Applause.)

The CHAIRMAN: I may add that so confident are the directors in the statements which have been telegraphed here that, without a single exception, we have considerably increased our holdings.

The AUDITOR (Mr. Craggs) having explained one or two items in the accounts, the motion was put, and carried unanimously.

On the motion of the CHAIRMAN, seconded by Mr. Fowler, Messrs. Craggs, Turketine & Co. were re-appointed auditors for the current year.

Mr. WEBB suggested that the whole of the development expenses should be put to capital account, so that they could start with a clear balance-sheet, and be in a position to divide the profits at once. He did not suppose that it would be in order to make a resolution to that effect at the present meeting, but the auditor might consider the point.

Mr. STANHOPE JONES proposed a vote of thanks to the Chairman and Directors for their able management.

Mr. FOWLER seconded the motion, which was unanimously adopted. The CHAIRMAN briefly acknowledged the compliment, and the proceedings terminated.

THE WEARDALE LEAD COMPANY, LIMITED.

The ordinary general meeting of shareholders in the Wear Dale Lead Company (Limited) was held yesterday, at the Cannon-street Hotel, the chair being occupied by Mr. GEORGE RICHARDSON.

The SECRETARY (Mr. R. S. MacLellan) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—We regret the character of the statement we are obliged to make to you showing a loss of about £890, but at the same time we feel that we have done all we could to keep down your expenses to the lowest possible figure, and that there is nothing we can do that will show a further reduction for the next year, excepting that we shall probably be able to reduce the London expenses by, perhaps, a couple of hundred pounds. You will observe that we have raised less during the 12 months ending June 30 than last year—in fact, 6746 bings against 6970. We have also dressed less, smelted less, and, naturally, the quantity of lead produced has been less. All that has been occasioned by the poorness of the miner, which, we regret to say, has continued, with the exception of Boltburn, which continues to hold its own, and to bear the burden of the greater part of the loss that has been incurred on the other mines. I may say that latterly Boltburn has turned out better than it has ever been; it has been increasing. Sedlings has been, I regret to say, a great disappointment to us. When we started that lease we had all the information that was possible from every person in the neighbourhood, and in the light of what was said we thought it would be a good thing to make this Sedling trial. We regret to say that it has not come up to our expectations, and that probably it will be considered wise for the time being not to spend any more money upon so unprofitable a mine. Killhope we have opened up again, and it looks as if that mine might become of importance again. You are aware that four years ago the water came in, and it is only lately that we have had that water out, and have commenced to open the mine up. We expected that we should have done more than we have at the present moment, but the air is bad in consequence of the mine being shut up for some time. We are, however, now getting into a position where, we think, Killhope will be a fair mine. In former years, when we worked it, it was one of those mines which gave very good returns, and we think now that we shall not be disappointed in getting some returns from this mine. With regard to Greenlaw, Mr. Maxfield will tell you exactly how that mine stands to-day. That will show you exactly how we stand to-day in regard to your mines, and the other point for consideration is simply that of the accounts. Now, we have sold £23,000 worth of lead, and we have realised an average of £10 17s. per ton. That is the net figure Parkhead. Of course, when you see the quotations in the papers of Newcastle, you are aware that there is a cartage at railway rate of 6s. a ton to Newcastle, and that we only deliver at Parkhead. By referring to the report you will see that we are in hopes that we shall be able to make an arrangement with the Commissioners as before. At present the matter is not quite adjusted; in fact, we are in negotiation now. We hope that, as heretofore, they will be generous to us. Referring to the accounts, you will see that the "rates and taxes" are less, the travelling expenses are less, the London office expenses are a little less, and the insurance fees are the same. The debenture is £1500, and the other interest is £674, against £702. Consequently you will see that, taking one side with the other, although we show a loss of £880, we have managed to effect a reduction in nearly everything over which we have had actual control. So far as the lead trade is concerned, I may mention that the price went up to £12 a ton. Since then it has gone down a little—it is now £11 15s.—but we have sold ours at £11 17s. 6d. at Parkhead. (Hear, hear.) Now, I will move the adoption of the report and accounts formally, and if there is any question to be put I will answer it to the best of my ability.

Mr. HOPKINS said he had much pleasure in seconding the resolution. He did not know that he could add anything to what the Chairman had said. The broad facts were that they had got one good mine, two middling ones, and one that was very bad. They hoped and had some reason to expect that Groverake Mine would improve, and that from the Killhope Mine they would get some rich ore. Greenlaw, at the present time, did not look very flourishing, neither did Sedling.

Mr. FETTERIDGE asked whether the men's wages could not be reduced. He noticed that they were £23,000 last year, and during the current year they had spent £2000 more, and the price of lead had been better, being 25s. 6d. per ton. In spite of this, however, they had produced less, sold less, raised less, and smelted less. The shareholders and the lords seemed to get nothing out of the mine, and, therefore, he thought it was time the workmen gave up a little. He also wished to know how they were going on in the present year, whether, so far as they had gone, it had turned out better than the past.

The CHAIRMAN said, in regard to the wages, they felt that they were as low as could possibly be paid. During the year under review the average cost was £2 14s. 10d. a bing, while during the six months up to date it was £2 13s. 2d., thus showing a small reduction. The men individually got from 12s. 6d. to 15s. a week.

Mr. W. J. FOSKETT remarked that in the report the amount realised by the sales of tin was put at £23,224 12s. 10d., but in the balance-sheet the item for the sales of lead was £23,399 0s. 3d. Had the directors any explanation to give to account for this difference?

The CHAIRMAN said it was the difference between the stock going in and going out.

Mr. BLENKIRON said on the last occasion the Chairman told them that they had practically turned the corner. Well, the corner had been turned by raising less than in the previous year. They seemed to have lost considerably during the year, for 90 tons were taken from the reserve. With the hopes and prospects promised them, but not yet fulfilled, they still hoped and believed that there was

a brighter future before them. In conclusion, he contended that a change in the management both in London and at the mine was desirable.

Mr. W. J. FOSKETT called attention to the financial position of the company, which, to his mind, was a most serious one, and demanded immediate attention. They had no capital behind them, and how they were to go on he could not understand. As far as the debentures were concerned, they were liable for uncalled capital, which amounted to £210 per share. Personally, he had strong objections to borrowing money for carrying on a mine with such uncertain results. It was bad enough to lose any money, but when it came to borrowing from others, at the rate of 6 per cent, he thought the sooner the company ceased to exist the better. He quite thought in 1893 he had come to the conclusion that if the Sedling Mine did not turn out well they would abandon it. However, he thought they should that day address themselves to the financial position only. Unless they did so he was quite sure that there was no hope for the company. Besides the debenture interest he noticed that they paid from £600 to £700 for other interest. That seemed to represent a loan of £12,000, and he would like to know if it was secured in any way. As to the £25,000 of debentures, this, he believed, was due in six months' time—in July, 1897. He also asked on what basis the stock was valued at the figure entered in the balance-sheet.

The CHAIRMAN said the stock was valued at £10 12s. 6d. per share. With regard to their liabilities, they had been going on from time to time as floating liabilities. If, however, the shareholders desired them to be cleared off the directors would make a call and get rid of them. They expected that the debentures would be renewed in July next. Their position was no worse now than for some time past. Of course, with all mines it was a question of hope—there was nothing permanent in any mine, whether situated in Australia or Africa—and they hoped, and had always hoped, that they were going to do better than they had done. The reduction in the London expenses would take place in this way—the secretary's salary would be reduced £100, the office expenses would be reduced by £50, and another £50 would come off the general expenses. During the last four months—from June 30 to December 5—they had produced 2453 blings, as against 2547 blings in the same period of last year. They had also smelted 200 tons ore.

Mr. HOPKINS said one point on which an explanation was required was Mr. Blenkiron's statement that when he was down in the Sedling Mine he saw a vein which had been passed. If he was correct, why did he not speak about it at the time?

Mr. BLINKIRON said he told Mr. John Thompson of the matter, and advised him to work on it.

The CHAIRMAN said he was down at the mine at the same time as Mr. Blenkiron, but the matter was not mentioned to him.

Mr. FOSKETT wished for a reply to his question as to whether there was any security given for the loan of £12,000.

The CHAIRMAN replied that no security was given.

The resolution was then put and carried unanimously.

Mr. MAXFIELD, referring to the remark made by Mr. Blenkiron as to the vein in the mine having been missed, said it was very often the case that the Weardale veins were in two parts, and in the particular instance remarked upon there was a part which carried the lead of the vein, and another part which carried the spar. It was always safer to follow the lead, and at Sedling, after following the lead for a few fathoms, they found they were wandering rather way. They had one or two men behind on tribute, and the spar was off. They, of course, instantly stopped, for it would have been unwise to continue driving. They came out into the spar and followed it, and as long as there was spar, they would follow it. But he could affirm that they had never lost that vein since they started from the shaft. The most hopeful mine they had at the present time, according to his judgment, was the Boltburn, about which he had had a letter that morning stating that the ventilation had very much improved, and that the writer had "never liked the prospect better" than at the time of writing. The letter stated that the "flats" were very strong and healthy both to the north and the south, and there was every encouragement to continue opening up. As to Groverake, the directors had seriously considered shutting the mine down, but they thought that, seeing the interests at stake, they would sink down into the limestone from the 60 fathom level. Accordingly they put down a sump there, and discovered that there was every prospect of the vein being richer than in the quarry-hazel above. They intended to work it now in a proper manner, and if they were only as successful as they hoped to be, they would be able to continue working Groverake over again. With regard to Killhope, they had sunk a shaft, and taken out the water, and the mine was now doing fairly well, although they had not been able to get to the far end on account of the bad atmosphere.

Mr. F. G. LANE thought every point brought up in the discussion had been satisfactorily explained, and considered that the directors were doing their utmost in the shareholders' interest. Mr. Maxfield had drawn attention to several points in the mines which were really improving, and his hopes were that these points would develop to such an extent as would give them better returns at their next meeting. He thought, therefore, they ought to congratulate themselves that the directors were doing so much in their interests. They were cutting down expenses to the lowest possible point; in fact, he did not like to see the salaries of the staff reduced. After what they had heard from their Chairman and Mr. Maxfield, he considered that they could not do otherwise than express their confidence in the management.

The CHAIRMAN then moved the re-election of Mr. Hopkins as a director of the company.

Mr. LANE seconded the motion, which was carried.

Mr. W. FAWCETT said a wish had been expressed by the shareholders in the North that they should be represented on the board, and he therefore proposed that Mr. J. C. Swan be elected a director of the company.

Mr. J. S. WILSON seconded the resolution, and it was carried.

Mr. James Fraser was elected auditor of the company, and a vote of thanks to the Chairman and directors concluded the meeting.

LONDON-PARIS FINANCIAL AND MINING CORPORATION

The Hon. Henry A. Lawrence presided, on Monday, at the ordinary general meeting of this company, held at Winchester House, and in moving the adoption of the report, said the history of the corporation had been practically the same as the history of South Africa during the same period. But they had by no means lost faith in their securities or the country, and they deemed it better not to realise until times improved. They already represented 21 different companies on the Continent, which brought them in £6000 a year. In exchange for this payment the Continental shareholders expect to be kept informed of all that was going on, and he felt confident that the money expended in getting together such a large clientele had not been lost. They were now, however, working 25 per cent. cheaper than at the time of the construction of the company, and 50 per cent. cheaper than at the time of their highest profits. They hoped to make further reductions. Although they had a profit of £45,000, it was deemed best to carry forward a considerable sum in the present state of the market, and not to declare any dividend at present. If six months hence there was a more solid state of things, they would declare an interim dividend. The directors were so confident in the future of the undertaking that they held 125,000 shares in the corporation, or over one-fourth of the whole capital.—Mr. H. C. Bucknall seconded the motion, which was carried with acclamation, and a vote of thanks to the Chairman terminated the proceedings.

RICHARD HORNSBY AND SONS (LIMITED).

An ordinary general meeting of shareholders in this company was held on Monday, at the Cannon-street Hotel.—Mr. James Hornsby presided, and, in moving the adoption of the report, expressed regret that they were unable on that occasion, for the first time in

the history of the company, to pay a dividend, the year's working showing a loss instead of a profit. Circumstances had been too strong for them to make a profit during the past year, but the company was financially in a strong position, the liabilities being small and the cash, book debts, and stocks being large. A heavy stock of harvesting machinery had to be carried forward last year, and the shops and plant usually devoted to making that class of machinery had therefore been working short time, most of the required stock having been already made. The further improvement of the oil-engine trade in various new directions was proceeding as rapidly as possible. They had supplied the first oil locomotive to Her Majesty's Government, and their engine had been adopted by the United States Government for fog signals upon their lightships. He and his brother had bought, but had never sold, shares in the company, in the capital of which their family held £175,000. After serious consideration of the position the directors had thought it right to strengthen the board, and they proposed the election of two new directors—men of great experience and connected with successful enterprises—he referred to Mr. H. Simpson Gee and Mr. Edward Wood, both of Leicester.—Mr. H. H. Johnston seconded the motion.—The Chairman, in reply to a question, stated that since the date of the balance sheet £58,612 had been received of the £94,000 of sundry debtors.—Mr. Tongue, of the firm of Messrs. Edwin Collier and Co. (the auditors), stated that the sales in the past year had been more than in the previous year, but the output had been less. The working had been adversely affected by special charges amounting to nearly £18,000.—The report was unanimously adopted, and Messrs. Gee and Wood were elected directors.

NEW ZEALAND JOINT-STOCK CORPORATION (LIMITED).

The first ordinary statutory meeting of this company was held at the Cannon-street Hotel, on Monday.—Mr. A. W. Biggs, the Chairman, said the company was registered early in August, and since then 100,000 shares had been applied for and duly allotted; 10s. per share had been called up, which gave them a working capital of £50,000. There was still a liability of 10s. per share on these shares, but they did not intend to call up this capital, as they thought it of interest to the company to retain it as a sort of final reserve. It was also their intention, as they made profits, to carry a large proportion of them to the reserve fund, so that year by year they would accumulate. During a large portion of last year business generally was quiet, and the company were wise in embarking in no large schemes until the outlook cleared. Since then, however, they had made up for lost time. They had now several businesses in hand which, without the slightest doubt, would result in considerable profit to the company. The company was promoted with the object mainly of doing business in New Zealand, a country which was likely to become one of the most profitable gold producing countries in the world. Their company had special facilities for prospecting and acquiring mines; they had already an interest in two properties, the prospects of which were very promising, and, in addition, they had identified themselves largely with the northern territory scheme. The northern territory had long been known to be exceptionally rich in gold, and the directors looked forward with the greatest confidence to the realisation of handsome profits in connection with that particular district. It was likely to be one of the finest properties in any part of the globe, and without being too sanguine, he had no fear as to the future, especially as during the few months the company had existed they had already succeeded in making a handsome profit. (Applause).—Mr. R. B. Tetley endorsed the Chairman's remarks to the satisfactory prospects of the company and the wonderful development in gold mining which he predicted for New Zealand.

ST. AGNES GOLD REEFS (LTD.)

The first ordinary general meeting of the shareholders in the St. Agnes Gold Reefs (Ltd.), was held on Monday at Winchester House, E.C., Mr. A. H. Lancaster (Chairman of the Company), presiding. In moving the adoption of the report and accounts, the Chairman said the more the reefs on their property were developed the more satisfied were the directors of the value of the mine. The deeper they went down the richer the reefs became. The machinery would have been erected before now but they had had the water difficulty to contend with. However, at a depth of a little over 175 feet water was found in a neighbouring mine, and therefore, seeming to think No. 1 shaft was almost down as deep, they hoped to soon make a similar discovery. Mr. Bond, sen., one of the directors, had recently visited the mine, and had written that it was the general opinion in the neighbourhood that the St. Agnes was the best mine as yet discovered in the Norseman district.—Mr. N. C. Cookson seconded the motion, and it was agreed to. Messrs. W. B. Peat & Co. were re-elected auditors, and a vote of thanks to the chairman concluded the meeting.

NEW GUADALCAZAR QUICKSILVER MINES (LIMITED).

The second ordinary general meeting of the shareholders in the New Guadalcázar Quicksilver Mines (Limited) was held on Tuesday at the Cannon Street Hotel. Mr. William Furber presided, and in moving the adoption of the report and accounts, said that the accounts before the shareholders were somewhat different in form to those ordinarily submitted. The proceeds of the quicksilver used to give the net amount received from the consignees after deducting freight and commission, but they now thought it better to give the gross amounts and show the freight and commission paid. As with the present condition of the mines, the fact that the ore had picked out could not by any possibility be laid at the door of either the directors or managers. The mine, it was true, was unfortunately pockety, but it was a rich mine, and he was hopeful as to the ultimate future of the company.—Mr. E. M. W. Goslett seconded the motion, and explained, with regard to the quicksilver held by the bank as security, that the directors had refrained from selling that quicksilver, because they were advised they could get a better price by holding it back, and the event had justified that policy. He strongly recommended a policy of not declaring dividends until they had actually earned the money and strengthened the position of the company, and he expressed his confidence that the company was now in a fair way for making good progress.—After considerable discussion—during which an amendment for the appointment of a committee of investigation was proposed and withdrawn—the motion for the adoption of the report and accounts was carried.

BENDIGO DISTRICT GOLD MINES OF VICTORIA (LIMITED).

The first annual general meeting of the shareholders in the Bendigo District Gold Mines of Victoria (Limited) was held yesterday, at the Cannon-street Hotel, when Mr. L. Campbell-Johnston, the Chairman, in moving the adoption of the report and accounts, said they would remember that the four mines they acquired from the London and Victoria Syndicate were old workings which had been abandoned in consequence of the former owners being too poor to provide the necessary pumping machinery to deal with the water. Work had so far only been done on the Beautiful Venice and Corly Dog leases. In addition to the properties already mentioned, another lease had been secured; it was called the Staffordshire, and a subsidiary company was being formed to work it. Information they had received from the local authorities in Victoria proved that the Beautiful Venice was a valuable property, although the ore in the Staffordshire was of a low grade—a 5 ton sample yielded 13 dwts. a ton, there was an immense amount of stuff, and, therefore, it could be worked at a profit. A cablegram received yesterday stated that the present depth of the shaft on the Beautiful Venice was 290 feet. Water impeded work, but the sinking of the shaft had been discontinued, and a crosscut started at a depth of 285 feet. They expected to meet with the lode in at least eight weeks.—Mr. Van Praagh seconded the motion, and said the company had ample working capital to ensure the success of the undertaking.—The resolution was carried.

GOLDEN PLUM CONSOLIDATED GOLD MINES (LIMITED).

The adjourned annual general meeting of the shareholders in the Golden Plum Consolidated Gold Mines (Limited) was held on Thursday, at Winchester House, E.C., under the presidency of Mr. E. de Lissa.—The Chairman explained that the meeting was adjourned in order that the directors might present a written report.

All work had now been stopped at the mine, pending a settlement of the financial position, total exemption from labour conditions having been granted by the West Australian Government for one month from November 15, so that expenditure for the present is reduced to a minimum. Mr. Alfred Morgans had been instructed to inspect and report upon the mine, and the telegraphic summary of his report would be published as soon as received. In the event of Mr. Morgans' report not being favourable to further development of all or any of the existing leases, the Barroo Syndicate had offered to transfer to the company, free of cost, three leases of equal acreage in the Black Flag district, provided a committee of the shareholders of this company approved the same after full examination by and report of experts nominated by them. In the meantime, however, the financial position of the company required further expenditure would become necessary to avoid the forfeiture of the property.—After a long discussion the report and accounts were adopted.—Afterwards an extraordinary general meeting was held for the purpose of considering resolutions for the reconstruction of the company, but the matter was adjourned until with a vote of thanks to the Chairman.

MOUNT CHARLOTTE GOLD COMPANY (LIMITED).

The annual meeting of the shareholders was held on Wednesday, in Edinburgh, Mr. James Romanes, C.A., presiding.—The annual report stated that the company's accounts to June 30 last from the commencement of the company's operations showed that of £40,000 reserved for working capital £22,018 7s. 10½d. had been expended.—The Chairman, in moving the adoption of the report, said that the principal efforts of the manager and the principal interests of the directors and the shareholders had for some time been very much concentrated upon the desperate which was being sunk at the south end of the property, called the Murray lode. At the date of last meeting this shaft had been sunk half the present depth. The result so far had been rather disappointing. The lode was extremely large, and correspondingly poor, and they were advised it was the proper policy to continue sinking down to the lower levels, where it was expected the lode would be contracted, and be very much richer. The work was now going on, and he hoped within a few weeks they should hear that the lode had been reached. There was one rather important element in the last report, which was that water was increasing. It was proposed to make a somewhat radical change upon the board, reducing it from seven members to four, and the fees, of course, would be reduced accordingly.—Mr. Robertson, Dundee, seconded the motion, and the report was adopted after some discussion.

GREAT GOLD ZONE MINING, EXPLORATION, AND ESTATE COMPANY (LIMITED).

An ordinary general meeting of the Great Gold Zone Mining, Exploration, and Estate Company (Limited) was held on Wednesday, at Winchester House, E.C.,—Mr. H. Bailie-Weaver, who presided, in moving the adoption of the report and accounts, said that when he joined the board three years ago he found affairs in a deplorable condition, the whole of the working capital having been expended, and the only moneys available for the conduct of the company being the interest receivable from the Portuguese Government on money deposited by the company as a guarantee for the fulfilment of the conditions contained in their concession. Since that time he had consistently devoted himself to trying to extract for the shareholders some benefit from the money they had invested in the enterprise without asking them to subscribe any more capital, and to put the company on a sound legal basis. With this object he had attempted to negotiate a contract with a Parisian firm by which the company would be furnished with sufficient money to carry on their operations. This, unfortunately, had fallen through, and what he had feared most had happened—viz., that the Portuguese Government were preparing to take action against the company on grounds which he was afraid they would have some difficulty in resisting. The Portuguese Government had issued to their colonial governors instructions to inquire into the cases of all companies holding concessions in Portuguese territory as to what they were doing, and what money they had got for the purpose of carrying on their operations. In their own case this step would probably lead to the cancellation of the company's concession. Having struggled for a long time, he had come to the conclusion that the only possible course for the company were liquidation and reconstruction.—The report and accounts having been seconded, were carried, and after some discussion as to the position of the company, the meeting terminated with a vote of thanks of the Chairman.

VOGELSTRUIS ESTATES AND GOLD MINES (LIMITED).

The ordinary general meeting of the shareholders was held on Wednesday at Winchester House.—Sir Donald Currie, M.P., presiding, and in moving the adoption of the report, stated that the company to which the mortgage was originally granted transferred it to another company, but without any success on the part of the new company. After a considerable period and much negotiation, the debenture holders took over the property and formed the present company with an authorised capital of £200,000. In order to have a working capital he assisted in carrying out the subscription of £50,000 at £1 per share, and the development showing every prospect of successful results, there was ultimately an issue of 50,000 shares at £3 per share, thus securing to the company a working capital of £200,000. The financial position having been secured, the co-operation of Mr. Goodwin and Mr. Skinner, of the Durban—Roodeport Company, was obtained, with suitable engine and pumping arrangements, was adopted after the most careful consideration on the part of the directors. The 80 stamp battery was now at work, and by reason of the quantity of ore that had already been developed they might look for an uninterrupted run of the mill in the future. At present they were directing their attention to the development of less than half of the outcrop claims of their property, independently of the dip claims, estimated at about 135, which should add to the longevity of the mine. He was indignant to make any prophecy as to the possible dividends the shareholders would receive in the future, but he hoped they shared with the board the expectation of a reasonable and successful issue to the efforts which had been made to carry out their enterprise. Having stated that the local manager had secured a sufficient number of Kaffir workmen to follow operations at the mine, he concluded by reading a cablegram from the manager (Mr. Skinner) dated the 8th inst.—"Machinery works well. Mine is looking very well. Good results permanently."—Mr. J. S. Prince seconded the motion, and, after some remarks from Mr. J. A. Roger (a member of the Johannesburg board), the report was adopted.

THE PESTARENA UNITED GOLD MINING COMPANY.

The report of the directors shows that the results of the year's operations have been very satisfactory, and the profits obtained have exceeded that for any other similar period. The gold produced realised £30,706 1s.; other items appearing in the revenue account, including increase in stock of ore, amounted to £2208 0s. 1d., making a total of £32,914 1s. 1d. The expenditure in Italy and England amounted to £22,591 5s. 6d. The profit for the year was, therefore, £10,322 15s. 4d.

The appeal from the Lord Mayor's decision in the Queen's Trade Mark case stands for hearing next week in the Queen's Bench. The question raised was of general importance—namely, whether the trade mark of an English firm, containing English words, without any words to indicate that the goods are not of home manufacture, may be placed on foreign-made goods after they have been imported into this country. Mr. Solicitor-General (Sir Robert Finlay), Mr. Satten, and Mr. Frank Safford will appear for the Board of Trade, while Mr. Cook, Q.C., and Mr. Cutler will represent the company.

from winze, A shaft and C shaft, crushed 53 tons; 380 ounces of gold; tailings, assay average 1 ounce 16 dwts. per ton. Some of it (the gold) is very fine.

NEWHOUSE TUNNEL.—The following cable has been received from Denver:—"We have driven during the past month 175 feet, laid 350 feet drain. Have struck a strong body of water."

NIGEL GOLD.—Last month's crushing yielded:—1059 ounces battery, cyanide 804 ounces, total 1863 ounces.

NEW GUADALCAZAR QUICKSILVER.—A cable has been received from Mexico, stating that the production of quicksilver for the past week amounted to 2000 lbs., equal 26½ flasks.

NIGEL DEEP.—Copy of cable received from South Africa:—"Have struck the Nigel reef in D shaft at 686 feet, assays 3 ounces 14½ dwts. per ton over about 5 inches."

NEW QUEEN.—The directors have received the following cablegram for past fortnight, dated Charters Towers, December 5:—"Have drawn on you for £490. Shipped per *Banffshire* 267 ounces gold. Shall proceed to open up.—No. 6 formation. Have been obliged to stop sinking because have struck a flow of water. Sunk deep shaft 5 feet during fortnight."

NEW CHARTERS TOWERS GOLD.—In answer to telegraphic enquiry from the board, the following cablegram has been received from Charters Towers:—"Trial crushing will not be completed for 10 days. Cyanide process most favourable. Complete plant, including everything necessary for cyanide, will not exceed £2500."

NEW OPTIONS.—This company has received the following cablegram from Mr. T. G. Davey, dated December 10, viz:—"Monarch. Shaft has reached a depth of 132 feet. Average width of lode is 9 feet; continues in high grade ore. We are now crushing ore. Shall clean up next week. We have struck another independent chute high grade ore the bottom of the shaft."

NEW COMET.—The Anglo-French Exploration Company (Limited), as London agents to the New Comet Gold Mining Company (Limited), have received a cable from Johannesburg to the effect that the crushing for last month was as follows:—

"The number of tons crushed 2527
" ounces recovered from mill 802
" tons treated by cyanide 3418
" ounces recovered from cyanide 416

Total number of ounces recovered .. 1218
The mill ran only 10 days on account of insufficiency of water. From advice since received by cable, we are informed that it is expected that within 14 days an adequate supply will be obtained to keep the full head of stamps running.

NORTH RANDFONTEIN.—Production for November:—By Cable:—"Mill. Stamps running, 30; ore crushed, 4503 tons of 2000 lbs.; gold returned, 1699 ounces."—Official Note: With regard to the output, no gold has been obtained from the tailings and concentrates, on account of the scarcity of water owing to the drought; the company's reservoirs having been completed after the last rainy season was over. Rains are inspected every moment, when the company will be able to work up to its full power. The rook milled has also not been of the best quality, as in opening up the mine the full width of the reef has been taken for the purpose of setting the plates and getting the faces of the stopes in order. Only 30 stamps have been at work."

OURO PRETO.—This company has sold the October gold for £5279 7s. 1d.

PALMAREJO.—Return for November:—"Crushed, 2050 tons; worked 1800 tons, producing £43,000; expenses, \$35,500."

PORGES RANDFONTEIN.—Production for November: By cable:—"Mill. Stamps running, 60; ore crushed, 5989 tons of 2000 lbs.; gold returned, 2259 ounces.—Tailings, cyanide process. Tons treated, 4140 tons of 2000 lbs.; gold recovered, 672 ounces.—Concentrates, cyanide process. Tons treated, 210 tons of 2000 lbs.; gold recovered, 84 ounces; total gold recovered, 3015 ounces."

PIGGS PEAK DEVELOPMENT.—The following cable has been received from the mine, viz:—"During the month (November) mill worked 16 days crushed 1400 tons, yielded 173 ounces gold. Assay of tailings 6 dwts. per ton. Have collected 1050 tons of tailings, worth £930. Owing to the scarcity of labour the erection of cyanide delayed. Have decided to shut down mine and 30 stamp mill December 12, push ahead with cyanide works, continued crushing will entail very considerable expense to collect tailings. (Mr. Percy) Whitehead (a director who is on the spot) strongly advises immediate temporary closing." The directors have cabled their approval of the manager's proposal.

ROBINSON.—Production for November. By cable:—"Mill. 120 stamps at work. 13,781 tons of ore crushed yielded in smelted gold 11,039 ounces. From concentrates (by chlorination) 1270 ounces. From tailings (cyanide process) 3710 ounces. From alimes 1270 ounces. From own ore 17,289 ounces. From concentrates bought (by chlorination) 2895 ounces. Total gold recovered 20,184 ounces. Profit for month £40,000."

ROODEPOORT UNITED.—Result of operations for month of November:—70 stamps crushed 6320 tons, produced 2645 ounces (*decrease mill output owing to scarcity of native labour); cyanide, 854 ounces; total, 3499 ounces; profit, £4350.

REGINA (Canada, Lake of the Woods).—The following cablegram was received December 8 from the Chairman, Lieutenant-General Wilkinson:—"The main shaft is down 210 feet. Vein is fully 6 feet wide. Have struck a large ore body in the third level north, assaying 4 ounces 10 dwts. per ton. Last fortnight's output 56 ounces of gold."

ROODEPOORT GOLD.—The following cable has been received:—"Production for November, 1329 ounces; 40 stamps; 28 days."

SALISBURY.—Last month's crushing yielded 1600 ounces. Owing to continued drought the battery now closed, and the dam is dry.

ST. JOHN DEL REY.—The following telegram has been received from Mr. Chalmers:—"Produce month November, 31,000 oitavas, equal to 3573 ounces troy, value £12,012; yield per ton 46 oitavas (53 ounces troy)."

VICTORIA REEF.—Cable from Australian agents:—"Manager reports: Expect machinery to be working by last week in December. Pushing the matter forward with all possible speed. Main shaft, new find, looking first-rate."

VAN RYN.—The following cable has been received from Johannesburg:—"Mill ran 34 days (80 stamps), crushed 12,489 tons, recovered 3525 ounces, treated 7900 tons, cyanide recovered 982 ounces, total ounces recovered 4507."—Note. The above is the first crushing of the new mill.

VICTORIA GOLD MINING ASSOCIATION (Charters Towers).—The following cablegram has been received at the London office:—"296 tons crushed yielded 550 ounces gold."

VICTORY (Charters Towers).—Messrs. A. Durant and Co., the London agents, have received the following cablegram from head office, dated Sydney, December 4:—"Crushed from No. 3 shaft 270 tons for 436 ounces of gold. Approximate value, £1500. Expect additional 40 ounces from final clean up."

WESTERN AUSTRALIAN DEVELOPMENT.—Mr. E. A. Lloyd, the mine manager, reports:—"Dorothy. Shaft has been sunk a further depth of 18 feet, making a total of 168 feet

WATER TRUST.—New Victoria South Mines. Cablegram from the general manager:—"On the 100 feet level west drift developments opening up splendidly. Fortnightly output assays 4 ounces 5 dwts. per ton."

WEMMER.—The following cable is to hand:—"The result of work done during November: 5298 tons crushed, yielding 3638 ounces of gold, 22 days; and from cyanide plant 3125 tons treated, yielding 976 ounces, and from concentrates 135 tons caught, assaying 95 dwts."

WITWATERSRAND (Knights).—The following cable is to hand, giving result of work done during November:—"60 stamp mill run 26 days; 8188 tons crushed, yielding 2627 ounces smelted gold; 5350 tons cyanide tailings treated, yielding 1062 ounces gold; total output, 3689 ounces."

GREAT BUNYONG ESTATE.—Cablegram states:—"Alluvial sinking shaft completed, driving in both directions."

GINSBURG.—Production for November 1579 ounces, 40 stamps, 20 days.

HENRY NOURSE.—Cable advice has been received of the declaration of a dividend (No. 1) at the rate of 30 per cent., payable to shareholders registered on December 31.

LANGLAAGTE ROYAL.—Cable from the above company:—"Production for November 3664 ounces, 100 stamps, 24 days."

NEW PRIMROSE.—Production for November 7727 ounces, 160 stamps, 25 days, profit £5932.

NEW HEIDELBERG-ROODEPOORT.—Cable from the above company:—"Production for November 11,552 ounces, 40 stamps, 28 days."

SIMMER AND JACK PROPRIETARY.—Crushed 13,120 tons. Obtained 4956 ounces of gold from mill, 605 ounces of gold by chlorination, and 2127 ounces of gold from tailings by cyanide during the month.

WOLHUTER.—Cabled advice of operations for November:—"100 stamps crushed 10,814 tons, produced 3839 ounces cyanide produced 1831 ounces, total 5670 ounces."

LONDON AND SOUTH AFRICAN EXPLORATION COMPANY.

The directors of this company have declared a dividend of 4s. per share, less income tax, for the quarter ending the 31st instant, payable on and after that date, making, with the three previous dividends paid, a total distribution for the year of 16s. per share.

The SUBSCRIPTION LIST WILL OPEN ON MONDAY, 14th December, 1896, and will CLOSE on or before WEDNESDAY, 16th December, for LONDON, and THURSDAY, 17th December, 1896, for COUNTRY Applications.

The Bank of Adelaide, 11, Leadenhall-street, London, E.C., and Williams Deacon and Manchester and Salford Bank (Limited), Manchester, and Branches, are authorised to receive Subscriptions for the undermentioned issue of Shares.

THE HAYCRAFT GOLD REDUCTION AND MINING COMPANY, LIMITED.

(Incorporated under the Companies Acts, 1862 to 1893.)

CAPITAL £200,000.
Divided into 200,000 Shares of £1 each.

PRESENT ISSUE £95,000,
OF WHICH

£40,000 is now OFFERED FOR SUBSCRIPTION,
payable as follows:—

5s. on Application,
5s. on Allotment,
5s. on January 8, 1897,
5s. on February 8, 1897.

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J. London Strain, A.M.I.C.E. (Chairman New Coolgardie Gold Exploration and Finance Association, W.A. (Limited), Chairman,
A. J. Davis, 31, Poultry, London, E.C.
Joseph Stanor, J. Dronfield (Dronfield Brothers, Limited), Atlas Works, Oldham.
Frederick Lees, Middleton, Lancashire.
J. E. Mellor, Ashton-under-Lyne.
J. H. Smith, A.M.I.C.E. (late Chairman Railway Commissioners, South Australia).

COLONIAL DIRECTORS.
*William Moffin, Adelaide, South Australia.
*Charles Rapp, Adelaide, South Australia.
*Who will be appointed after allotment.

BANKERS.
London: Bank of Adelaide, 11, Leadenhall Street, London, E.C.
Manchester: Williams Deacon and Manchester and Salford Bank (Limited), Mosley Street, Manchester, and Branches.

SOLICITOR.
E. T. Hargraves, 19, St. Thomas Street, London, E.C.

BROKERS.
London: E. R. Haselden and Co., 27, Finsbury Street, London.
Manchester: Fernyhouse and Aske, India Buildings, 14, Cross Street, Manchester.

AUDITORS.
Oldham: John Hood, 42, Clegg Street, Oldham.

ROBERTSON LAWSON AND CO., Chartered Accountants, 34, Old Broad Street, London, E.C.

SECRETARY AND OFFICES.
R. GORDON, 31, POULTRY, LONDON, E.C.

ABRIDGED PROSPECTUS.

This Company is formed for the following purposes:—

(a) To acquire the exclusive rights for Western Australia of Haycraft's Gold Extraction Process on the terms hereafter mentioned.

(b) To acquire and work the Special Plant for treating ore by the Haycraft process, together with a leasehold battery site of five acres adjoining the Bon Accord mine, Kalgoorlie, Western Australia.

(c) To acquire, develop, and work the Victory and Harts of Oak Mines, comprising two leases, aggregating 36 acres or thereabouts, situated in Hannan's district, Kalgoorlie, Western Australia.

The Haycraft Gold Extraction Process (Patent No. 549, dated August 21, 1894, for Western Australia), consists of a combination of two well-known operations, viz: Electrolytic chlorination and electro-amalgamation, carried on in one vessel at boiling temperature, after the ore has been subjected to the usual crushing.

The special features of this process are its simplicity and completeness, for the whole ore is treated in one operation as received from the mill, and during that operation practically the whole percentage of gold in the ore is extracted in two hours' time.

The special advantages of this process are as follows:—

(I.) Cheapness.

(II.) The use of salt water (which is so abundant in Western Australia) instead of fresh.

(III.) The smallness of the quantity required, 130 gallons per ton only (50 of which can be used again), as compared with a minimum of 240 gallons for the ordinary battery.

(IV.) Simplicity of adjuncts, i.e., firewood, salt water, and mercury (100 lbs. of mercury will absorb 200 ounces of gold, and is ready for use again after passing through the mercury retort).

(V.) Great saving in time occupied by treatment.

(VI.) The non-formation of slimes and tailings and the consequent saving of any loss of gold in this direction.

A complete plant for experimental purposes was erected at Adelaide early in 1895, where it has since been running on sample parcels of ore sent from all parts of Australia. A special trial was made by Mr. Nicholson, of Adelaide, the well-known expert, of the Haycraft process, as compared with battery and cyanide treatment. The results gave 6 to 10 per cent. more gold saved by the Haycraft process in two hours than by the battery and cyanide treatment combined in 48 hours.

The other results have proved most satisfactory, as can be seen from the tabulated statement accompanying the prospectus, and the percentage of gold extracted has varied from 36 to 97½ per cent. In each case a full charge of 1 ton has been treated, the difference in weight between the parcel sent and the proper charge being made up by the addition of ordinary sandstone, and in one case 16 tons were treated.

Full Prospects and Forms of Application can be obtained from the Bankers, Messrs. Solicitors, and the Office of the Company.

MINING AT GREAT DEPTHS.

By BENNETT H. BROUGH, Assoc. R.M.S., F.L.C., F.G.S.

THE recent announcement that the Red Jacket shaft of the Calumet and Hecla Mine in the Lake Superior copper region has been sunk to a depth of 4900 feet, the greatest depth hitherto reached by a mine shaft, opens up a large field of speculation as to future developments of mining at great depths. The subject is one of great importance in view of the rapid exhaustion of the thicker and more accessible seams in the British coal fields, and in view of the attention which at the present time is being devoted to the working of deep level auriferous deposits in the Transvaal, California, and New Zealand. It appeared, therefore, that a well-considered summary of the existing literature of the subject, supplemented by observations made during visits to the mining districts of the Transvaal, Lake Superior, and the Continent, would not be out of place in the proceedings of the Society.

The LECTURER then gave an historical record of depths attained, when comparatively shallow depths, in ancient times, were looked upon with wonder; and then read the following list of modern deep shafts:—

Deep Shafts.

United States:—	Feet.
Red Jacket, Calumet, and Hecla, Lake Superior ..	4900
Tamarack, Lake Superior	4450
Yellow Jacket, Comstock, Nevada	3123
California Mine, Colorado	2290
Grass Valley, Idaho	2182
Kennedy Mine, Jackson, California	2150
Pottsville shaft (disused), Philadelphia and Reading Coal and Iron Company	2000
Belgium:—	
Produits Colliery, Mons	8087
Viviers shaft, Gilly	3750
Vierney shaft, Anderlues	3300
Marchienne Colliery	3117
St. André shaft, Poirier Colliery, Charleroi ..	3100
Clypi Colliery, Mons	2950
Housu Colliery, Centre	2900
Marihay Colliery, Liège	2100
Average depth of all Belgian collieries	1420
Austria-Hungary:—	
Adalbert, Przibram, Bohemia	3072
Maria, Przibram	3281
Anna, Przibram	3100
Franz Josef, Przibram	2900
Procopi, Przibram	2900
Einigkeit, Joachimsthal, Bohemia	1750
Amalia, Schemnitz, Hungary	1750
Great Britain:—	
Pendleton, Manchester (workings)	3474
Ashton Moss, Manchester (workings)	3300
Astley Pit, Dukinfield (workings)	3150
Dolcoath Mine, Cornwall	3082
Rose Bridge Colliery, Wigan	2446
Cook's Kitchen, Cornwall	2436
Harris' Navigation, Pontypriid	2367
Cadeby Main Colliery	2220
Bickershaw Colliery, Leigh	2210
Moss Collieries (No. 4 pit), Wigan	2205
Astley Pit, Dukinfield (shaft)	2038
Niddrie, Portobello, N.B.	2010
Wearmouth Colliery	1722
Leamhead Colliery, Shott's Iron Company ..	1700

Victoria:—
Lansell's, Bendigo 3302
Lazarus, Bendigo 3034
Magdala, Stawell 2409
25 gold mines exceed 2000

Germany:—
Kaiser Wilhelm II., Clausthal, Harz 2200
Einigkeit, Luga, Saxony 2020
Samson, St. Andreasberg, Harz 2000
Frieden Colliery, Olmitz, Saxony 2515
Concordia Colliery, Olmitz, Saxony 2430
Hansa Colliery, Huckarde, Westphalia 2330
Maria Colliery, Hungen, Westphalia 2200
Camphausen Colliery, Saarbrücken 2200
Freiberg, Saxony (maximum depth) 2000

France:—
Montehanin Colliery, Le Creusot 2300
Treuil Colliery, Saint Etienne 2034
Hottinguer shaft, Epinac 2000
Ronchamp Colliery, Haute-Saône 1670

South Africa:—
Robinson Deep, S.A.R. 1901
Nourse Deep 1874
Crown Deep 1821
Langlaagte Deep 1392
Jumpers Deep 1290
Kimberley Mine, Cape Colony 1201
De Beers Mine 1007

Norway:—
Kongsberg Silver Mine 1000

The results here recorded afford clear evidence that a great many of the difficulties which were formerly connected with the sinking of deep shafts have now disappeared. The valuable inventions and appliances available to the mining engineers have rendered such sinking operations easy, and comparatively inexpensive. It, therefore, appears that no considerations of a mechanical nature need limit the prospective depths of shafts.

B.—Obstacles to Deep Mining.

The elements needing consideration regarding the limits of depth in mining, are:—

1. The decreasing capacity of deep shafts.
2. The increase in pressure.
3. The increase in temperature.
4. The increase in expenditure.

These four obstacles I now propose briefly to discuss.

1.—Decreasing Capacity of Shafts.

It is obvious that the quantity of mineral extracted from a shaft diminishes in proportion to its depth. The methods adapted for obviating this inconvenience are as follows:—

- (a) Increasing the speed of winding.
- (b) Enlarging the skips or cages.
- (c) New methods of extraction.
- (d) Increasing Winding Speed.—Turning to the first of these methods, we find that the evolution of the winding arrangements forms one of the most interesting chapters in the history of the mining industry. Starting with men or women carrying the mineral on their backs up ladders, the improvements successively introduced have been a pulley supported by a frame above the shaft; the hand windlass; or the capstan; the win-

* A paper read before the Society of Arts.

† Mining Journal, September 26, 1894.

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IN THE HIGH COURT OF JUSTICE, CHANCERY DIVISION.
 Mr. Justice STIRLING.—1896 N. 036.—In the Matter of
 NIXON'S NAVIGATION COMPANY (Limited and Reduced), and
 in the Matter of the Companies Act, 1867, and in the Matter of the
 Companies Act, 1877.—Notice is hereby given, that a PETITION
 presented to Her Majesty's High Court of Justice, Chancery Divi-
 sion, on the 25th day of June, 1896, for CONFIRMING a RESO-
 LUTION REDUCING the CAPITAL of the above Company from
 £780,000, divided into 7800 Shares of £100 each, with £87 16s. paid
 up thereon and £12 4s. uncalled, to £546,000, divided into 7800
 Shares of £70 each, with £65 16s. paid up thereon and £4 4s. un-
 called, is directed to be HEARD before Mr. Justice Stirling on the
 19th day of December, 1896.
 GADSDEN and TREHERNE, 28, Bedford-row, London, W.C.,
 Solicitors for the Company.
 Dated this 4th day of December, 1896.

THE
FRONTINO AND BOLIVIA (SOUTH AMERICAN)
GOLD MINING COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that the ANNUAL MEETING
 of the SHAREHOLDERS of this Company will be held at
 Winchester House, Old Broad Street, in the City of London, on
 WEDNESDAY, the 16th day of December, 1896, at two o'clock
 p.m., for the following purposes:—
 To receive the Report of the Directors and the audited state-
 ment of accounts of the company for the six months ending the
 30th June, 1896; to declare a Dividend; to elect a Director; to
 elect an Auditor, and for other business.
 The Transfer Books of the Company will be closed from Monday,
 the 7th of December, 1896, until Thursday, the 17th of December,
 1896, both days inclusive.

By Order of the Board.

J. JAMESON TURAN, Secretary.
 184, Gresham House, Old Broad Street, London, E.C.,
 December 8, 1896.

THE ENGLISH CROWN SPelter COMPANY
(LIMITED).

NOTICE IS HEREBY GIVEN, that at a MEETING of the
 Directors of the above Company, holden at No. 9, Queen
 Street Place, E.C., on the 8th inst., it was resolved:—
 "That an interim dividend of 1s. per £1 share, free of income-
 tax, be and is hereby declared on account of profits for the year 1896,
 and that it be payable on THURSDAY, the 17th instant, to the
 shareholders on the books of the Company on Monday, the 14th
 December, 1896, and that the Transfer Books be closed during the
 said 14th day of December."

By Order of the Board,

E. C. LEAVER, Secretary.

THE NAMAQUA COPPER COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that the DIRECTORS have
 decided to DECLARE, at their meeting to be held on the 17th
 inst., an INTERIM DIVIDEND of 1s. 6d. per Share (free of income
 tax) on account of the current year, payable to the Shareholders
 registered in the Books of the Company on that day, and to holders
 of Share Warrants to Bearer.
 The dividend will be payable on Thursday, the 24th December.
 The Transfer Books will be closed during the said 17th day of
 December.

By Order of the Board,

C. LEWIS BENNETT, Secretary.
 34, Leadenhall Buildings, Gracechurch Street, London, E.C.,
 10th December, 1896.

THE HAURAKI GOLD MINING COMPANY
(LIMITED).

NOTICE IS HEREBY GIVEN, that a DIVIDEND of 1s. per
 share, free of income-tax, will be PAID on and after the 5th
 day of January, 1897.
 Holders of Share Warrants to bearer must lodge Coupon Serial
 No. 7 at the Offices of the Crédit Lyonnais, Paris, or at the Com-
 pany's Office, 97, Dashwood House, New Broad Street, London,
 E.C., three clear days for examination.

By Order,

W. J. LAVINGTON, Secretary.
 London, 11th December, 1896.

COLONIAL BANK.

(Incorporated by Royal Charter, 1836.)

Subscribed Capital ... £2,000,000
 Paid up ... 600,000
 Reserve Fund ... 150,000

THE Court of Directors of the Colonial Bank hereby give notice
 that, in pursuance of the provisions of the Charter, a HALF-
 YEARLY GENERAL MEETING of Proprietors will be HELD at
 the Bank House, No. 13, Bishopgate Street Within, London, E.C.,
 on THURSDAY, 7th January, 1897, at Two o'clock precisely,
 to receive the Report of the proceedings of the Corporation, and for
 the election of five Directors and one Auditor, in the room of the
 following gentlemen, who go out by rotation, viz.:—John James
 Cater, Esq., Charles B. G. Hoare, Esq., Neville Lubbock, Esq.,
 Arthur J. McConnell, Esq., and Charles A. Prescott, Esq., Directors;
 and T. A. Welton, F.C.A., as Auditor, all of whom being eligible
 offer themselves for re-election.

The Transfer Books of the Corporation will be closed on 16th
 December, 1896, and reopened on the 13th January, 1897.

By Order of the Court of Directors,

GORDON WILLIAM TURNER,
 Assistant-Secretary.
 13, Bishopgate Street Within, London, E.C.,
 10th December, 1896.

J. H. HOSKING, F.G.S.,
 MINING ENGINEER.

Recently returned from the African Gold Fields, is PREPARED
 to ADVISE ON MINING INVESTMENTS at Johannesburg,
 Barberton, and other gold districts of South Africa.

UNDERTAKES INSPECTING AND REPORTING ON
 MINING PROPERTIES.

Address: 21, GREAT ST. HELENS, E.C.

The Mining Journal,
 RAILWAY & COMMERCIAL GAZETTE.

ESTABLISHED IN 1835.

THE MINING JOURNAL, RAILWAY AND COMMERCIAL
 GAZETTE, published every SATURDAY MORNING, price
 SIXPENCE, is recognised throughout the World as being the oldest,
 most influential, and most widely circulated Journal devoted to the
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ALL OVER THE WORLD.

Amongst Mine Owners, Capitalists, Investors, Mining, Metallurgical
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 its circulation is cosmopolitan.

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 interest in it held or exercised, by any mine owner, speculator,
 or syndicate; and it is in no way connected with any share-
 dealing agency.

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 literary contributions should be addressed to "THE EDITOR." All matter
 intended for insertion must be written on one side of the paper only. The
 return of rejected manuscripts cannot be guaranteed. The Editor invites
 correspondence and items of news or information from readers in all parts
 of the World.

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 NEW ZEALAND: W. F. MCWILLIAMS, Thames.
 SOUTH AFRICA: O. SACERDOTE, Gerson's Buildings, Johannesburg.
 GERMANY: F. E. CLOTTE, Komödienstrasse 9, Köln a. Rh.
 NEW YORK: CHARLES MILES, 179, Washington Buildings.

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LONDON: DECEMBER 12, 1896.

THE GOLD FIELDS OF WESTERN ONTARIO.

BY a strange coincidence, barely had the world awakened to
 the knowledge that British Columbia, the Pacific province
 of the Dominion of Canada, contains valuable deposits of
 gold when reports of discoveries of the precious metal in the
 remote western district of Ontario began to be circulated. How
 well authenticated were these rumours, and how important the
 results promise to be to the province of Ontario, may be judged
 from a perusal of the official report recently published by the
 Department of Crown Lands. At the instigation of the Bureau
 of Mines, Professor COLEMAN, geologist and mineralogist, devoted
 a portion of the summer to a trip through what was reported to
 be the gold-bearing district. The report referred to sets forth
 the results of a careful examination of the leading mines
 and claims encountered during a journey of nearly 700
 miles. A perusal of the pamphlet cannot fail to com-
 vince that if such valuable discoveries have already
 been made in a remote and almost unexplored district, and
 development of the country which has now commenced, and
 which will be speedily followed by the advent of means of loco-
 motion, now wholly lacking, should result in the Lake of the
 Woods and Rainy River taking a leading place amongst the
 world's gold-producing countries.

Part VI. deals with the mineral statistics of foreign countries, and is by far the most important part of all, nearly one-half of the present publication being devoted to it. It would obviously be impossible for us to notice this part with anything like the fulness of detail that it merits. We can only say that it is immeasurably superior to anything of the kind that has been done before in this country, and, though still imperfect, shows such marked improvement over the first annual report as to allow us to reasonably expect that we shall have here a thoroughly reliable and complete index to the mineral production of the world in a few years more. Many of the errors that were only too patent in the first report have been corrected in this one, and the tables are, in most cases, well up to date. We are, however, surprised to see Dr. FOSTER state that the figures for Hungary for 1894 are not yet available, because they were published in the beginning of the present year in the *Oesterreichische Zeitschrift für Berg und Hüttenwesen*, in which they have almost the force of an official publication, and can safely be adopted.

We are glad to see that metric tons and kilogrammes are throughout used as the standards of reference for weights, but to our mind it is at least as important that a uniform standard for values should be adopted, and this standard should, in our opinion, be pounds sterling, whilst there should in every case be a note giving the monetary unit of the country in question, and the rate of exchange at which the calculations have been made. We look upon this as absolutely indispensable if these tables are to be as useful as they should be to English miners.

It is curious to find this publication of the British Government quoting some of its statistics, notably those for South America, from the Mineral Industry, and this is, we think, the highest possible compliment that could well be paid to its able editor, Mr. R. P. ROTHWELL. It constitutes a tacit acknowledgment that he, a mere private individual, and the editor of an American newspaper, is capable of securing more reliable statistics as to the mineral output of remote countries than can be obtained by the high officials of our own Home Office, backed by the extended diplomatic and consular relations, and the enormous power and wealth of the richest country in the world. Whilst thus a compliment to Mr. ROTHWELL, it is the most crushing condemnation at the same time of our foreign consular representatives. They it is, whose duty it ought to be to collect such statistics, and to supply them to Dr. FOSTER, instead of compelling that gentleman to fall back upon an American newspaper for his information. Dare we hope that our Consuls abroad will see this matter in its true light, and wake up to their deficiencies? If not, we hope that they will receive a sharp awakening from this side.

We notice that Dr. FOSTER says that no complete mineral statistics of the Chilean Republic are published. He is obviously unaware that Chili publishes by far the best mineral statistics of any South American Republic. We have, in the first place, the annual official *Estadística Comercial de la República de Chile*; and, in the second, two valuable unofficial publications that give also most useful information—namely, the *Boletín de la Sociedad Nacional de Minería*, and the *Boletín de la Sociedad de Fomento Fabril*, both published in Santiago. In these, Dr. FOSTER will also find full tables of the export of Bolivian mineral produce from the Chilean port of Antofagasta, which practically means the mineral production of Bolivia. Information about the Dutch East Indies again is provokingly scanty. We wonder that Dr. FOSTER has not availed himself of the well-known admirable *Jaarboek van het Mijnwezen in Nederlandsch Oost-indië*, which would have enabled him to show how the production of those islands is distributed amongst them. We are pleased to see such complete statistics of Indian mineral productions, though the values attached to some of the items appear somewhat fantastic. We are also glad to see statistics of the production of tin ore in Siam, but it would be all important to know whether the amount here given is produced in Siam proper, and whence and whither it is shipped, or whether it comes from the Protected Siamese Malay States, and is thus shipped via Penang as "Straits tin." Why, too, is there no return of gold, or rubies, or of sapphires from Siam? All these substances are certainly produced in that country, which may, before very long, be proved to be rich in minerals of all descriptions. The information given under the head of the Straits Settlements is very fairly complete and very welcome, but it is hard to see why Sungei Ujong and Jelebu should be included in Negri Sembilan; the two former are under one administration but are quite independent from the latter. Under the head of the United States we should have expected that an official publication would have preferred to use the figures given in Mr. D. T. DAY's annual volume of mineral statistics published officially at Washington, rather than those in Mr. ROTHWELL's admirable but non-official publication.

Although we have pointed out several respects in which these statistical tables are still susceptible of improvement, we trust we have made it abundantly clear that we have done so in no carping spirit, but rather with a sincere desire that what we have said may be found of value to the compilers when future reports are being prepared. As we have already pointed out, nothing of greater value to the British mineral industry has appeared for a considerable time, and we take it that we should be falling short in our own duty if we did not contribute all that lies in our power to enable future numbers to reach a higher standard of efficiency and accuracy, and, therefore, of public utility.

THE CHAMPION REEF.

THE report which the directors of this company have just issued will be read by the shareholders with complete satisfaction. The general tenor of it was, of course, anticipated, for the steady and increasing returns during the past 12 months, together with the general progress which has been made in every department, have been laid before our readers month by month. For a long time now Indian shares have been amongst the most attractive in the market, and during the height of the depression it is safe to say that they suffered the least of any. Champion Reef, especially, have been very strong, and those who purchased them, even at the highest prices, are not likely to regret it. A splendid record of work has been achieved during the 12 months covered by the report, whilst there is every promise that more brilliant work will be accomplished in the future. For instance, a great deal may be expected from the cyanide plant, which has just been set to work. It bids fair to be a great success, and when it is in full operation, and the initial difficulties have been overcome, the shareholders may look forward to much larger monthly outputs. Then there is the prospect of the mine opening out rich in depth, which, indeed, may be looked upon as a certainty. On this point the superintendent puts the following encouraging paragraph:—"I am pleased to

be able to state that during the year we have opened up some valuable ore ground throughout the mine, and I do not see any reason to doubt but that we shall continue to do so in depth. We may, I think, with confidence, look forward to a good increase in the returns during the coming year." Coming to the actual results and figures, the gold produced during the year realised the gross sum of £302,500, leaving as net proceeds, after payment of royalty, the sum of £287,516 4s. 10d. The profits amounted to £154,087 13s. 6d., exceeding that of the previous year by no less than £14,674. Two interim dividends have been paid during the year—viz., 4s. per share on May 1 and 4s. 6d. on September 1—and the directors now recommend a further dividend of 5s. per share, carrying forward the sum of £854 18s. 5d. This will make a total distribution for the year of 67½ per cent. The following table gives the gold returns for the 12 months:—

Period.	Quartz stamped, Tons.	Bar gold produced, Ozs.	Quantity of tailings treated, Tons.	Bar gold extracted, Ozs.	Net amount realised, £ s. d.
1895.					
October....	4,850 ..	5,891 ..	1,250 ..	313 ..	23,651 9 3
November ..	4,780 ..	5,910 ..	1,200 ..	318 ..	23,776 16 3
December ..	4,855 ..	5,968 ..	1,110 ..	269 ..	23,812 2 7
1896.					
January	4,850 ..	5,967 ..	1,210 ..	324 ..	24,030 15 5
February	4,725 ..	5,990 ..	1,140 ..	314 ..	24,081 4 3
March	4,950 ..	6,203 ..	1,180 ..	300 ..	24,868 14 0
April	5,000 ..	6,209 ..	1,820 ..	434 ..	25,393 4 1
May	5,980 ..	6,229 ..	2,010 ..	510 ..	25,682 12 6
June	5,400 ..	5,960 ..	1,740 ..	453 ..	24,638 14 0
July	5,000 ..	6,083 ..	2,100 ..	534 ..	25,328 1 4
August	6,020 ..	6,409 ..	2,320 ..	602 ..	26,665 8 0
September ..	6,747 ..	7,012 ..	2,180 ..	593 ..	29,075 19 7
	63,157 ..	73,851 ..	19,260 ..	4,964 ..	302,500 2 1

The above figures show an increase on last year's results of 13,452 tons of stone stamped, 5875 tons of tailings treated, 10,498 ounces of gold produced, and £38,040 7s. 9d. in value.

SHEBA GOLD.

THE shareholders of the Sheba Gold Mining Company have been somewhat anxious during the past three or four months at the steady decrease in the output, and certainly it is a circumstance calculated to engender some discouragement. In January of the present year the output jumped up by considerably over 2000 ounces a month; this was augmented slightly in the following month, whilst in March it again increased by a further 2000 ounces. In April it declined by a similar amount, and has continued to decline every month until October. For November it has increased, and as this happened in spite of the fact that the mill only ran 19½ days, it should greatly assure the shareholders, and relieve, in a great measure, the anxiety which they have naturally felt. The average yield per ton has been very high—viz., 1 ounce 14 dwts. 3 grains, as will be perceived from the following table:—

	Quartz crushed, Tons.	Yield, Ozs. dwts. grs.
1895. October ..	2,900 ..	4,247 17 12
" November ..	2,930 ..	4,294 3 0
" December ..	3,100 ..	4,693 9 12
1896. January ..	3,130 ..	7,011 2 0
" (clean up old mill) ..	830 0 0	830 0 0
" February ..	3,100 ..	7,439 8 0
" March ..	3,035 ..	9,626 2 12
" April ..	3,500 ..	7,297 6 0
" May ..	4,200 ..	6,818 5 0
" June ..	3,850 ..	5,482 19 0
" July ..	4,370 ..	5,480 10 0
" August ..	4,400 ..	4,425 19 12
" (clean up old mill and slag) ..	224 0 0	224 0 0
" September ..	3,300 ..	4,574 5 0
" (clean up old mill) ..	300 0 0	300 0 0
	41,815 ..	72,295 2 0

The following figures, giving the monthly returns from the cyanide works, will also bear inspection, and are likely to give complete satisfaction, showing, as they do, the excellent average yield of 12 dwts. per ton:—

	Quartz crushed, Tons.	Yield, Ozs. dwts. grs.
1895. October ..	4,250 ..	2,181 1 12
" November ..	3,400 ..	1,728 1 0
" December ..	2,850 ..	1,375 6 0
1896. January ..	3,450 ..	2,133 13 12
" February ..	3,400 ..	2,050 19 0
" March ..	3,200 ..	2,111 9 0
" April ..	3,300 ..	2,233 14 0
" May ..	3,350 ..	2,002 14 0
" June ..	3,450 ..	2,190 4 0
" July ..	2,950 ..	1,748 7 12
" August ..	3,050 ..	2,332 1 12
" September ..	2,650 ..	1,506 7 12
	39,300 ..	23,603 18 12

Altogether the results of the year's working have been excellent, and the shareholders are not likely at the forthcoming meeting to give expression to any feelings of dissatisfaction. They have been paid three dividends of 5 per cent. each, they have a good balance in hand, and as some very promising discoveries have been made, there is every inducement for them to look to the results of the current year with confidence and hope.

BRITISH GUIANA AND THE VENEZUELAN.

Owing to the delicate situation into which the industries of British Guiana have been put by the foreign sugar bounties, everything which contributes, in no matter how small a degree, to the pacification and settlement of that colony is of the very first importance. It is on this

and other grounds highly satisfactory to observe the pacific tone adopted in the American President's last message to Congress, and the certainty, every week becoming stronger, that the settlement of the disputed boundaries will be a matter rather for diplomacy than bayonets. With the withdrawal of American patronage from the Venezuelans we may expect to see a considerable shrinkage in the demands of that nation, and a rather less aggressive attitude adopted by its accredited agents. The matter of difference which has been for so long a time in issue will thus be brought considerably nearer settlement, and it will not be too soon, for the cloud of uncertainty hanging over British Guiana cannot but be productive of unfortunate results to the industrial activity of the colony. Unfortunately the richest part of the gold territories seem to lie near the debatable ground, and it would be too much to expect that the mines in that locality should be attacked with the same happy conjunction of enterprise and vigour which is essential to their successful opening up. It is true that the Venezuelans have done something towards allaying the natural anxiety in this connection by assuring the leaders of the industry that, whatever settlement may ultimately be given to the territorial question, mining will be given every encouragement which the Venezuelans find it in their power to afford. At the same time, the miners may be pardoned for devoutly hoping that English and not Venezuelan may be the rule reserved for their ultimate destiny, since the Republic, though one of the best administered of the South American States, leaves at the same time a good deal to be desired in the way of stable and propitious Government. There is no need at this time to insist upon the tremendous influence exerted upon any branch of industrial activity by the particular form and character of the Government under which it is pursued, and the future of gold mining in the region in question will, no doubt, be considerably affected by the political question now hanging in the diplomatic balance. Whatever else can be said of them, no one would venture to state that the negotiations now in progress have been conducted with indecorous haste. What may be regarded as the doubtful territory has not been in dispute for less than a quarter of a century, while the difference in its most acute international phase has troubled the world's peace for nearly a year, and has been the indirect and insufficient instrument of provoking a good deal of dangerous feeling between two kindred nations. President CLEVELAND's valedictory address has been somewhat reassuring as to the ultimate issue of the question, and the "Venezuelan difficulty" may be said now to be removed beyond the class of questions likely to occasion foreign complication.

THE NEW AMERICAN TIN PLATE "COMBINE."

THE news cabled this week that a new agreement has been made by the Tin Plate Manufacturers' Association of America, and a list of prices drawn up on the basis of \$3.05 (14s. 8½d.) per box of 14 by 20 I.C., weighing 108 lbs., affords distinct evidence of the revival in that particular branch of American industry which has set in now that McKINLEY has been returned. American manufacturers of tin plates have lately sold their production rather freely, but they have generally been unwilling to enter into contracts for delivery extending beyond January or February next, because of the upward tendency in the quotations of steel, which, of course, forms the basis of tin plate, and because they hoped to obtain higher rates for their production later on. The new prices understood to affect an area extending westward from the Atlantic to Chicago and Milwaukee; beyond this range prices vary in accordance with the additional cost of carriage. The new standard is believed to be high enough to afford a satisfactory profit without encouraging imports from Wales. If demand improves a further advance will probably be made, but the purpose of preventing as far as possible the further ingress of Welsh tin plates will, unfortunately, always be kept in view. The present import duty of 1 1-5 cents per lb. upon Welsh plates entering America is equivalent to 5s. 4d. per box of the description just referred to—or, it will be seen, more than one-third of the new agreed upon price—and yet the American tin plate manufacturers will, it is said, ask for further protection in the event of a new tariff bill being prepared! The absence in President CLEVELAND's message to Congress of any very advanced view upon tariff reform, such as were feared would be indulged in, is a crumb of comfort to our Welsh manufacturers, though it by no means follows that, therefore, the tariff will not be further raised. Meanwhile they have to face the unpleasant fact that the total quantity of tin plates sent from Wales to the United States in November this year has dwindled down to the miserable total of 5340 tons, or about a third of what it was in the same month last year (16,186 tons in November, 1895), and about a quarter of what it was two years ago (22,332 tons in November, 1894). No wonder, with our chief market falling off in this manner our total tin plate exports to all markets are showing up badly. It is true that a temporarily improved demand from America has set in since the election, but the general position is deplorable, and the Welsh tin plate trade has our deepest sympathy.

NEW HAURAKI AND GOLDEN PAH.

It is too early yet to pronounce any decided opinion upon the future of these two properties. Both have held their meetings during the week, and a perusal of the speeches delivered at each, of which we give full reports elsewhere, will enable the shareholders and others to form their own judgment. What is true is that the shareholders look to the future of their respective companies with considerable confidence, for the situation of each is such as to promise success. In the New Hauraki development has been proceeded with in a satisfactory manner, with encouraging indications. That is really the history of the progress up to date. Certainly, on the face of it, it does not seem much, but it is solid and substantial, and should lay the foundation

of ultimate prosperity. The Golden Pah Company was formed for the taking up 19 acres of the celebrated Hauraki property, and this in itself is almost sufficient to inspire perfect confidence in the minds of the shareholders. The history of the Hauraki is well known, and its remarkable richness has made the property celebrated all over the world. We are told that there are five distinct lodes running through the Golden Pah, and that two of these have exactly the same bearing as the principal main lodes on the Hauraki. This is decidedly promising, and the progress which this company makes during the next 12 months will be watched with the keenest interest.

THE MINING MARKET.

FRIDAY EVENING.

An easy Settlement followed by a smart rise in Kaffirs on encouraging reports from the Rand.—West Australians firm, Miscellaneous inactive.

AFTER rather more seesaw movement than we have seen for some time past, the Mining Market is displaying a firm tendency with advancing prices, more especially in the African section. The outlook at the moment is decidedly more encouraging, though it is obviously unwise to attempt prophecy as to the duration of this or any other condition of things. The general opinion seems to be that markets are fairly well bottomed, even if there is not much encouragement to look for a substantial rise. Saturday was a very quiet day, weakness being reported from Paris, whilst operators on this side evinced no desire to enter upon fresh commitments. During the last hour, however, some quiet buying of Kaffirs imparted an air of hopefulness to the market, and closing prices were generally above the level of the preceding night. This tendency was extended to the West Australian section, though the actual improvements scored were not large. Monday morning showed that the early birds had been well inspired, for the leading Kaffir fancies opened appreciably higher, and throughout the day a succession of small purchases gave an appearance of activity such as had not been seen for some time. It was regarded as significant that so much buying should take place on the eve of the settlement, indicating clearly the existence of a bear position in the ranks of the professionals. West Australians in a less degree reflected the strength of the African market, and New Zealanders were steady, but Indians were dull. On Tuesday morning there was quite a scramble amongst the bears, with the result that prices rose appreciably before mid-day, and the making-up list was fixed at nearly the best points touched. No sooner was the carry over arranged, however, than the bears returned to the attack, and prices rapidly receded under sales which seemed to be based on nothing more solid than the old Stock Exchange superstition that business is always dull during a nineteen days' Account. The last Account of the year comes into this category, but its actual length will be restricted by the intervention of the Christmas holiday. On Tuesday there was very little doing in the West Australian market apart from the dealings in Northern Territories, which commanded plenty of attention in anticipation of the issue of the prospectus. Little change was revealed in the position of the account in either section of the market and the carry over was effected without difficulty. We deal with the contango rates in each division under its respective heading. On Wednesday morning Kaffirs were decidedly flat and prices gave way all along the line. The rumoured new issue by the Consolidated Gold Fields company formed the chief pretext for the selling, but there was some talk of a Bank failure at Johannesburg. It goes without saying that this story has not yet been confirmed. Just before the House closed, two or three pieces of favourable intelligence came to hand with surprising promptitude, and another stampede set in among the "bears," who continued bidding for stock in the Street until not only were the previous losses recovered, but some substantial gains were scored. West Australians were an appreciably harder market, and the Miscellaneous department was quietly steady. On Thursday, which was Ticket day, things were very quiet until well into the afternoon, when Kaffirs had a significant little spurt on the publication of the figures of the November yield at the Rand. These were considerably better than had been anticipated and sent the bears into cover. West Australians were fairly good, and New Zealanders were strong. There was not much doing in Indians. The Rand return has had further effects to-day, and the bears have displayed a good deal of uneasiness. The selling of real stock having come to an end for the time being, some of the leading houses are coming in to support the market. The settlement was satisfactorily concluded to-day, and in the afternoon a sharp upward turn carried Kaffirs up all along the line, some substantial gains being scored. West Australians were firm without any very special feature, and there was not much doing in miscellaneous shares.

South Africans.

When the market was flat on Tuesday, bears were full of gloomy forebodings of another decrease in the Rand output. The actual figures, published on Thursday, gave them a disagreeable surprise, for in spite of the fact that there was one less working day in the month, the figures were well over those for October. The return published by the Chamber of Mines was the first to come to hand, and this showed a falling of 4175 ounces, but this loss was more than compensated for in the yield of the companies reporting through the Association of Mines, which showed an increase of 5399 ounces. The total output for the month thus reached 201,113 ounces, as compared with 195,218 ounces for November, 1895.

The carry-over on Tuesday revealed no important alteration in the position of the account. If anything, rates showed a disposition to harden as the day proceeded, though as the bears are the professionals ranged against the bulls amongst the public, too much reliance must not be placed upon deductions on this head. The contango on Gold Fields opened at 3 per cent., and went to 5. East Rands opened at 4, and went to 8. Chartered were done at 1d. in the morning, but the rate hardened to 2d., whilst the general charge on gold shares was 6 to 7 per cent. On Johnny's Investment the contango was fairly 8 per cent., after opening at about half that figure.

A rumour was started in the middle of the week to the effect that the Goldfields company would shortly be making a new issue of shares to provide funds for the financing of some of the Deep Level undertakings in which it is interested. It was asserted that the price of issue would be such as to constitute a bonus to holders. At first the bears set to work to sell on this supposition, but second thoughts convinced them that to be short of rights, as well as original shares, was rather a hazardous position, and the new issue was quickly converted into a bull point. Nothing definite as to the directors' intentions has yet been published. The whole story may be an invention,

though it has sufficient probability on its side. The Deferred shares which during the last account were sold down to 7½ were made up at 8½. On Wednesday they were offered down to 7½, but close to-night a full point above that price, and 1½ better on the week. Chartered have been very well supported, closing ½ better at 2½. Gold Trusts have scored a full point at 6½, and Goldfields Deep 1½ at 7½. East Rands have been subjected to several severe attacks in token of the disapproval with which the market regards the latest plan of financial jugglery propounded by the directors, otherwise the H. F. Syndicate. The shares have, however, rallied in sympathy with the general improvement, closing ½ up at 4. Anglo-French Explorations have gained ½ at 3½, Comets ½ at 1½, and Angelo ½ at 3½. Deep Levels generally have been beneficially affected by some encouraging crushing returns. The Goldenhuis return for November showed an increased yield of 1120 ounces, and a profit of over £4000. The shares are ½ better at 4½, which is also the quotation of Consolidated Deep Levels. Nigel Deep have risen ½ to 1½, on the announcement that the Nigel Reef had been struck, assaying 3½ ounces to the ton. The Goldfields company is a big holder of these shares, and will benefit proportionately. The Bonanza announced a yield of 7182 ounces for November, with a profit of £17,000. This mine immediately adjoins the Robinson Deep, the shares of which are largely held by the Goldfields Deep. Rand Mines were down to 21½ on Thursday morning, after making up at 22½. The last price to-night is 23½, marking a gain of 2½ on balance. Improvements of ½ are shown in Nourse Deep at 4, Roddepoort Deep at 1, and Champ d'Or Deep at 1½. The improved returns from the mines have had a marked effect on the shares of most dividend-payers. City's have risen ½ to 3½, Ferreira ½ to 18½, Goldenhuis ½ to 3½, Henry Nourse ½ to 6½, Heriot ½ to 7½, Jumpers ½ to 4, Modders ½ to 3½, Nigel ½ to 2, Simmer and Jack ½ to 4½, Wemmer ½ to 6½, Crown Reef ½ to 9½, Durban-Roddepoort ½ to 6½, Knights' ½ to 4½, Mayer and Charlton ½ to 5½, Robinson ½ to 8½, Transvaal Gold ½ to 4½, Van Ryn ½ to 3½, and Vogelstruis and Wolhuter ½ each to 4 and 4½ respectively. The Barnato group has not been specially selected for attention, but prices are generally better. Glencairns have risen ½ to 2½, Primroses ½ to 4½, Johannesburg Investments ½ to 2½, Buffelsdoorn ½ to 1½, and Barnato Consols ½ to 1½. Robinson shares have received a fair amount of attention, and gains of ½ are shown in Langlaagte at 4½, Randfontein at 2½, and Robinson Banks at 4½. Land and Exploration shares are generally better. African Estates have risen ½ to 1½, Bechuanaaland ½ to 1½, Mashonaland Agency ½ to 1½, Mozambique ½ to 1½, New Africans ½ to 2, Oosana ½ to 1½, Rhodesia Exploring ½ to 4½ and Willoughby Consols ½ to 1½. Henderson's Estates have been helped by the issue of a satisfactory report and close ½ up at 2. Klerksdorp have rallied 1s. 6d. to 9s. Small gains are shown in the Lydenburg shares. De Beers have risen ½ to 29½, and Jagers ½ to 10½.

West Australians.

Contango rates in this department were on very much the same scale as they have been lately, operators having to pay from 7 to 10 per cent. according to their personal credit. The event of the week has been issue of the prospectus of the Northern Territories company offering for sale on behalf of the subscribing Trust companies 295,000 shares at £3 per share. To make things smooth for this issue, the shares have been bid up in the market to £4. Joint Stock Trusts have risen ½ to 2½ premium, and Associated are ½ up at 2½. Associated Southern are unchanged at 1, and Lake View Souths ½ at 1½. A small excitement has taken place in North Boulders which jumped up to 1½ on a good crushing return. The shares are finally better at 1. Great Boulders have risen ½ to 6½, but the strongest share in this group is Hannan's Brownhills, ½ better at 4½. Lake Views are ½ up at 7, and Paddington Consols have scored ½ at 1½, but Lady Lochs have lost a similar fraction at 1½. The Menzies group shows no particular changes. Lady Shentons are the turn harder at 2, whilst small losses appear in Menzies Mining and O'Driscoll, both at ½, and Menzies Reef at ½. White Feathers, after being better, are finally unchanged at 1½, whilst Hit or Miss and Wealth of Nations, both at ½, are respectively ½ and ½ better. Ramage Syndicates have improved ½ to 1. Hampton Plains are unaltered at 2½, as are Mainland Consols at 1½, and Exploring and Finance and London and Globe at 3½, but Western Australian Goldfields have lost ½ at 5½. The Western Australian Trading Corporation is on the eve of reconstruction. The Ordinary shares have been down to 1s., but have rallied to 2s. The Founders are 1½ lower at 1½.

Miscellaneous.

Things have been quiet in this section. The issue of the Mountain Copper prospectus at one time affected the older copper shares, but there has since been a recovery. Tintos have risen ½ to 24½, and Anacondas are the turn better at 5½. As much as ½ was paid for the call at 6 for the end of February. Broken Hills are unchanged at 2½, as are Mount Morgans at 3½, but Mount Lyells have lost ½ at 8½ on the issue of an adverse circular. Aladdins have been pressed for sale, and close ½ down at 1½. Indians have been helped by the declaration of another dividend on Champion Reefs, bringing the distribution for the year up to 6½ per cent. The shares are ½ higher at 7½. Mysore have gained ½ at 7½, and Nundydroog ½ at 3½, but Ooregums have relapsed ½ to 2½. New Zealanders show some irregularity. Consolidated Goldfields have been eagerly bought and close ½ higher at 3½, and Waitakauri has risen ½ to 4½, but Taitapu has fallen ½ to 2½ and Waihi are unchanged at 7.

STOCK EXCHANGE SETTLING DAYS.

Consols.

Wednesday, January 6, 1897.

MINING MAKING-UP DAY: Thursday, December 24.

MINING NAME DAY: Monday, December 28.

ACCOUNT DAY: Wednesday, December 30.

THE NEW STOCK EXCHANGE SECRETARY.

Mr. Edward Sitterthwaite, a partner in the firm of Clement Sitterthwaite and Sons, of 30, Throgmorton-street, has been appointed secretary to the Committee for General Purposes of the Stock Exchange in succession to Mr. Francis Lovien, who recently resigned.

EXPORT OF GOLD FROM THE CAPE.

CAPE TOWN, DECEMBER 9.

The *Norham Castle*, sailing to-day, takes gold of the value of £252,872.—*Reuter*.

STRIKE IN FRANCE.—A *Reuter's* telegram, dated Rimes, December 11, states that the mining strike at Rochebelle terminated yesterday.

THE METAL MARKETS.

THE METAL MARKET, LONDON, DECEMBER 11.

Copper.

THE speculative market was distinguished during the first two days of the week by large speculative purchases of three-months G.M.B.'s, the total turnover for the two days amounting to considerably over 3000 tons, the prices paid being £49 10s to £49 7s. 6d. three months on Monday, with cash at £48 13s. 9d. to £48 15s. The demand being freely met, values were not enhanced, and before Tuesday closed there was a decided predominance of seller, some of the selling being connected with a large failure in Glasgow. Tuesday's final value was accordingly lower—viz., at £49 5s. three months, and with the reduced newspaper quotation of Lake, there was continued selling on Wednesday, when down to £48 6s. 3d. s.c., and £48 18s. 9d. three months were done. Buyers coming in at the lower level, we witnessed a recovery to £48 10s. and £49 2s. 6d., respectively and the following day brought a decidedly firmer feeling with an improvement to £48 12s. 6d. s.c., and £49 5s. three months. T-day's market was firm at the opening with business at £48 16s. 3d., but £48 13s. 9d. was done later, and the close is quiet at £48 13s. 9d., £48 15s. s.c., and £49 5s. to £49 6s. 3d. three months. The price of Lake has been advanced again to the opening value.

Tin

Has been, on the whole, a yielding market this week, unsupported by any noteworthy speculative support, so that the sales made, though not particularly extensive, resulted in a considerable fall in prices. The opening was firm at £58 10s. cash Straits, and £59 7s. 6d. three months, 5s. less being taken during the day. On Tuesday, £58 2s. 6d. s.c., and £59 1s. 3d. three months were done. On Wednesday, £57 18s. 9d. and £58 16s. 3d. respectively were touched, whilst Thursday closed at £57 17s. 6d. and £58 15s. To-day we had a rather firmer market, with business at up to £58 s.c. and £58 16s. 8d. three months, the two positions closing respectively at £57 to £53 17s. 6d. and £58 15s. to £58 17s. 6d. In the Dutch market the relapse amounts to ½ d.—viz., the closing values being 35 fl. s.c. and 35½ fl. three months Billiton, and 35½ fl. Banca s.c.

Pig Iron.

Scotland shipped last week about 3000 tons, or 900 tons more than in the same week of last year. The course of the Glasgow market was at first downwards, business being done at from 48s. 5d. down to 47s. 10d., the lowest limit, being attained on Wednesday. Since then values have recovered briskly, and the close is firm at 48s. 3d. sellers s.c. and 48s. 6½d. a month. Hematite is quoted 50s. 4½d., and Middlesboro' at 40s. 3½d.

Lead

Remains decidedly quiet, and values have ruled rather under last week's close, with a limited demand. The final quotations are £11 8s. 9d. to £11 10s. soft foreign, and £11 12s. 6d. to £11 15s. English.

Spelter

Has likewise been devoid of animation during the period under review, and the close is dull at £17 10s. to £17 11s. 3d. ordinaries, and £17 15s. specials.

Antimony

Is steady at £29 10s. to £30.

Quicksilver

Remains steady at £6 12s. 6d. firsts, and £6 11s. seconds.

The following are to-night's (December 11) prices of metals:—			
Copper			
Tough cake and ingot	...	...	...
Best selected...	...	...	...
Electrolytic Copper	...	...	...
Sheets and sheathing	...	...	...
Flat bottoms...	...	...	...
Oil bars	...	...	...
Good merchantable, 1/2	...	...	...
Copper tubes, seamless	...	...	...
Alloys			
BRASS: Wire	...	...	...
" Tubes (solid drawn)	...	...	...
" Sheets	...	...	...
PHOSPHOR BRONZE: Alloys II.	...	...	...
" " III. or	...	...	...
" " VII.	...	...	...
" " XI.	...	...	...
" " Vulcan brand A1	...	...	...
IRON METAL	...	...	...
BULL'S METAL	...	...	...
Ferrobrown (Vivian's)			
Ingots...	...	...	...
Ordinary sheets, plates, bolts and bars	...	...	...
Screw bolts and nuts	...	...	...
Pump rods, plain	...	...	...
" finished	...	...	...
DELTA METAL: No. 4 (per ton)	...	...	...
" Sheets and plates (per lb.)	...	...	...
" Bars, round, square, flat (per lb.)	...	...	...
" hexagon (per lb.)	...	...	...
Tin			
English, ingots, f.o.b.	...	...	...
" bars	...	...	...
" refined	...	...	...
Straits, spot, and three months respectively	...	...	...
Australian, spot, and three months respectively	...	...	...
Banco " (in Holland)	...	...	...
FIN PAQUES: Charcoal, best quality	...	...	...
" ordinary	...	...	...
" Coke, best quality	...	...	...
" ordinary	...	...	...
These prices of tinplates are f.o.b. at Swansea; at Liverpool 8d. per box more.			
Iron			
Fig. S.W.M., f.o.b., Clyde, spot	...	...	...
" Scotch pig, No. 1 Gartsherrie	...	...	...
" Coltness	...	...	...
" Govan	...	...	...
Bars, Welsh, f.o.b. Wales...	...	...	...
Plates	...	...	...
Bars, Staffordshire, at works	...	...	...
Sheets	...	...	...
Plates	...	...	...
Hoops	...	...	...
Ship plates, Middlesborough	...	...	...
STEEL: English spring	...	...	...
" best	...	...	...
" Rails at works, according to section	...	...	...
Lead			
Spanish or soft foreign	...	...	...
English pig, common	...	...	...
" L.B.	...	...	...
" sheet and bar lead	...	...	...
" pipe	...	...	...
" red	...	...	...
" white	...	...	...
" patent shot	...	...	...
Spelter			
Silesian ordinary brands	...	...	...
" special brands	...	...	...
English Swansea	...	...	...
Sheet Zinc	...	...	...
Antimony			
Antimony	...	...	...
Quicksilver			
Planks, 75 lbs. warrants	...	...	...
Ore, c.l.f., U.K. ports	...	...	...
1st quality, 50 per cent. and upwards	...	...	...
2nd " 40 " 50 per cent.	...	...	...
3rd " 40 " 47 per cent.	...	...	...
Aluminium			
75-99% per cent.	...	...	...
Nickel			
99-99 per cent. guaranteed	...	...	...

The BALAGHAT MYSORE MINES (LIMITED) has sold the gold obtained during the month of October last, which realised £901 18s. 2d.

"THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—A, Antimony; Ar, Arsenic; B, Biende; Bz, Borax; C, Copper; D, Diamonds; G, Gold; I, Iron; L, Lead; M, Manganese; N, Nitrates; P, Phosphates; Q, Quicksilver; R, Ruby; S, Silver; Ss, Sulphur; T, Tin; and Z, Zinc. * In the "Amount of Share" column of African Mines signifies that the mine is conducted on "Cost Book" principles; 1 in the "Head Office" column of African Mines signifies that the address given is not that of the head office but of a sub, or transfer office; and 1, following the names of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

* The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

AFRICAN MINES.

Name.	Closing Price, Dec. 11, 1896.	Closing Price Dec. 4, 1896.	Am't. of Share	When last Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Office.
Adler Consolidated	3/4 3/4	3/4 1	1 0	2/ Oct. 1, '96	1 0	250,000	Transvaal.	1, Moorgate place.
African Estates	1 3/4 2 1/4	1 1/4 1 1/4	1 0	2/ & rts Oct. 16 '95	1 0	438,000	De Kaap...	3, Cophall-buildings
" Gold Revy.	3/4 3/4	3/4 3/4	1 0	rts Oct 30 '95	1 0	175,000		23, College Hill.
Afrikaner	1 1 1/4	1 1 1/4	1 0	rts May 24 '95	1 0	40,000	Transvaal.	23, College Hill
Alexandra Estate G	2 3/4 3 1/4	2 3/4 3 1/4	1 0		1 0	225,000	Hand	16, George street
Angelo	2 3/4 3 1/4	2 3/4 3 1/4	1 0		1 0	175,000		Winchester House
Anglo-French Exp.	3 3/4 3 1/4	2 1/4 2 1/4	5 0	3/- Sept. 30 '96	5 0	30,300	S. Africa	3, Princes street
" Matabeleland	3/4 1	—	1 0		1 0	39,750	Matabid.	Winchester House.
Appantoo	3/4 1	3/4 1	1 0	5% Mar. '93	1 0	77,885	West Coast	Dashedwood House.
Aurora	3/4 1	3/4 1	1 0		1 0	85,000	Hand	8, Old Jewry-l
" West United.	3/4 1	3/4 1	1 0		1 0	100,000	"	7, Lothbury
Bailei Kesteling G	1 1/4 1 1/4	1 1/4 1 1/4	10/	1/ Feb. 13, '96	0 10	520,000	Transvaal	35, Gracechurch-st.
" Land	3 6 4	3 6 4	10/	rts Sep 24 '95	1 0	520,000		15, Geo. st., Mn Ho.
Bantjes Consol. G	2 2 2 1/4	1 1/4 1 1/4	1 0		1 0	83,000		
Barnato Consol	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	1,000,000		7, Lothbury.
Barrett	11/ 12/	10 6 11 6	10/		0 90	407,496	De Kaap	17, Hastings-street
Bechuanaad Exp.	1 1/4 1 1/4	1 1/4 1 1/4	1 0	rts Jy 24 '95	1 0	400,000	Bechuana.	12, St. Swithin's-lane
Big Golden Quarry	1 1/4 1 1/4	7/3 7/8	5/-		0 5	483,225	Kaap Rivr	Wernford Court.
Black "B" Lang.	1 1/4 1 1/4	3/4 1 1/4	1 0		1 0	535,000	Hand	1, Bank Buildings
Bonanza	3 3/4 3 3/4	3 3/4 3 3/4	1 0		1 0	2,000	Turffont's	120, Bishopgate-st.
Brit. S. A. Char.	1 1/4 1 1/4	2 1/4 2 1/4	1 0	x rts Nov 12 '96	1 0	999,750	S. Africa	15, St. Swithin's-lane
Bullfinch Consol. G	1 1/4 1 1/4	1 1/4 1 1/4	1 0	16/- Nv. 28 '95	1 0	250,000	Potchefst	7, Lothbury
" Central	3/4 3/4	3/4 3/4	1 0		1 0	225,000		8, Old Jewry
" Consolidated	3/4 3/4	3/4 3/4	1 0		1 0	225,000		Wernford Court
Cape Asbestos	3/4 1	3/4 3/4	1 0		1 0	50,311	Orange Rv	19, St. Swithin's-lane
" Copper	2 3/4 2 3/4	2 3/4 2 3/4	2 0	3/ Dec. 11 '96	2 0	300,000	Cape Col.	9, Queen-street-place.
" S. Pref.	2 3/4 2 3/4	2 3/4 2 3/4	2 0	3/ Dec. 11, '96	2 0	45,000		
Castel Coal	1 3/4 1 3/4	1 3/4 1 3/4	1 0	1/5 Oct. 29 '96	1 0	75,000	Johannb.	83, Cannon-street.
Cent. de Kaap	9/ 9/3	9/ 1 1/3	5/-		0 50	240,000	De Kaap	Palmerston Bldg
" Rood's Deep	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	240,000		126, Bishopgate st.
Champ d'Or	1 1/4 1 1/4	3/4 1 1/4	1 0	3/2 Feb. 27 '96	1 0	116,016	Hand	8, Old Jewry, F.O.
Charterland G.F.	3/4 3/4	3/4 3/4	1 0		1 0	150,000		19, St. Swithin's-lane
Chinese West	3/4 3/4	3/4 3/4	1 0		1 0	150,000		Winchester Ho.
City and Sub. N.W.G	3 3/4 3 3/4	3 3/4 3 3/4	4 0	2/- Oct. 29, '96	4 0	340,000	Hand	Gresham Ho.
Consolidated	31/ 32/	31/ 32/	1 0	9d. July 15 '96	1 0	721,500	Griguland	62, Lombard-st.
Con. Deep Levels G	4 4 3/4	3 3/4 4	1 0	6/- Oct. 29, '96	1 0	187,500	Transvaal	30, St. Swithin's-lane
Con. G. Fields S.A.	8 3/4 8 3/4	7 3/4 7 3/4	1 0	15/ Nov 12 '96	1 0	120,000	S. Africa	8, Old Jewry.
Con. G. Pref.	1 1 1/4	1 1 1/4	5	71-5d Jan 26 '96	1 0	1,242,969		
Con. S. Z. Deben.	107 109	107 109	5	5 1/2 Jy 1, '96	5 0	500,000		
Crown Deep	9 10	9 10	1 0		1 0	250,000	Hand	120, Bishopgate-st.
" Reef	9 10 10	9 9 10	1 0	12/ Oct. 19, '96	1 0	120,000		
De Beers Consol. D	20 1/4 20 1/4	20 3/4 20 3/4	8 0	12/- July 15 '96	8 0	789,791	Kimberly	62, Lombard-street.
De S. 1st Deb.	107 109	107 109	1 0	5 1/2 Jy 1 '96	1 0	23,500,000		
De S. 2nd Deb.	99 101	99 101	1 0	1 1/2 J Oct. 1 '96	1 0	2720,400		
Driefontein	2 3/4 2 3/4	1 3/4 1 3/4	1 0		1 0	175,000		Winchester Ho.
Durban Deep G	6 3/4 6 3/4	6 3/4 6 3/4	1 0	3/- Sept. 18 '96	1 0	415,000	Hand	28, Leadenhall-bldg
" Deep	3 3/4 3 3/4	2 3/4 3 3/4	—		—	—		
Eastleigh	9 3/4 10 1/4	9 3/4 10 1/4	1 0	rts May 14 '96	1 0	240,000	Klerksdorp	57, Leadenhall Street
East Orion	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	275,000	Hand	8, Old Jewry.
" Hand	3 1/4 3 1/4	3 1/4 3 1/4	1 0		1 0	570,000		170, Winchester-ho.
Exploration	2 3/4 2 3/4	2 3/4 2 3/4	1 0	rts June 16 '96	1 0	148,000	S. Africa	30, St. Swithin's-lane
Exploring L & M.	3 1/4 3 1/4	3 1/4 3 1/4	1 0	2/ Dec. 16, '95	1 0	216,215		19,
Fezerra	18 18 1/2	18 18 1/2	1 0	25/ Aug. 28 '96	1 0	45,000	Hand	120, Bishopgate st. Wn.
French Rand	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	480,000	Hand	28, Aus. In Friars.
Golden Deep G	4 4 3/4	3 3/4 4	1 0		1 0	265,000	Transvaal	30, St. Swithin's-lane
" Estate G	3 3/4 3 3/4	2 3/4 3 3/4	1 0	2/5 Oct. 29 '96	1 0	187,500	Hand	120, Bishopgate st. Wn
" Main Reef	3 3/4 3 3/4	3 3/4 3 3/4	1 0	2/ Feb. 13 '96	1 0	150,000		Wernford Court, E.C
George Goch	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	100,000		Johannesburg.
Ginsberg New G	1 3/4 1 3/4	1 3/4 1 3/4	1 0		1 0	130,000	Driefont.	Wernford Court, E.C
Glencairn	2 3/4 2 3/4	1 1/4 2 3/4	1 0	rts Sep. 30 '96	1 0	200,000	Hand	2, Drapers-gardens
Golden Dove	3 3/4 3 3/4	1 1 1/4 1 1/4	1 0		1 0	50,000	Natal	65, Chancery Lane.
Gld. Fls. Deep. G	7 1/4 7 1/4	6 3/4 7 1/4	1 0		1 0	600,000	S. Africa	8, Old Jewry.
" of Lydenburg	1 3/4 1 3/4	1 3/4 1 3/4	1 0		1 0	200,000	Lydenburg	7, Lothbury.
" of Mashonaland	3 3/4 3 3/4	3 3/4 3 3/4	1 0		1 0	200,000	Mashonid.	19, St. Swithin's-lane
" Tlra d'Fgo	14/ 14/6	14/ 14/6	1 0		—	—		75, Leadenhall Street
Graskop	2 3/4 3 3/4	2 3/4 3 3/4	5/-	2 1/2 Mar. '92.	0 50	400,000	Lydenburg	2, Tokenhouse Bldg
Gt. astr. Colliery	3 1/4 1 1/4	1 3/4 1 3/4	10 0	4/ July 15, '96	1 0	375,555	Grootel	Gresham House.
Griqualand W. D	7 3/4 8 3/4	7 3/4 8 3/4	10 0		10 0	105,700	Transvaal	62, Lombard-street
Heidelberg. Est. Est.	3 3/4 3 3/4	3 3/4 3 3/4	1 0		—	—	Heidelberg.	
Henderson's Trans	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	250,000	Zoutpazg.	35, Gracechurch st.
Henry Nourse G	6 3/4 6 3/4	5 3/4 6 3/4	1 0		1 0	100,000	De Kaap...	Wernford-court.
Jb'g Con. Invest (N)	2 3/4 2 3/4	2 1/4 2 3/4	1 0	2/ Sep. 30, '96	1 0	550,000		
" Pioneer	8 9 7	8 9 7	1 0	8/ Oct. 15, '96	1 0	21,000	Hand	7, Lothbury.
Jubilee	6 3/4 7	6 3/4 7	1 0	4/ Oct. 29 '96	1 0	30,000	Hand	Johannesburg.
Jumpers	3 3/4 4 3/4	3 3/4 4	1 0	6/- Mar. 27 '96	1 0	100,000	Hand	8, Old Jewry.
" Deep	4 5	3 5 8	1 0		1 0	300,000		120, Bishopgate st. Wn
Kimberley	par 3 1/4 pm	par 3 1/4 pm	1 0	1/ June 10, '96	0 10	98,672	Kimberley	19, Finsbury circus
" Rdp.	2 2 1/4	1 1/4 2 1/4	1 0		1 0	125,000		2, Drapers-gardens
Kleinfont in Cen.	3 3/4 3 3/4	3 3/4 3 3/4	1 0		1 0	225,000	E. Hand ..	Winchester House
Klerksdorp	8 3/4 9 3/4	7 3/4 9 3/4	10/-		0 10	400,000	Klerksdorp	10, Cannon St.
Knight's Deep	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	205,190	Hand	8, Old Jewry
Kofffontein D	1 1/4 1 1/4	1 1/4 1 1/4	1 0	x rts Jun 10 '96	1 0	125,000	Jacobsdal	6, St. St. Helen's.
Lancaster	2 2 3/4	1 1/4 2 1/4	1 0		1 0	275,500	Luip. Viel	20, Bishopgate st. Wn
Langlaagte Est. G	4 3/4 4 3/4	3 3/4 4 3/4	1 0	3/ July 30 '96	1 0	400,000	Hand	1, Bank Buildings
" Royal	1 1/4 1 1/4	3 3/4 3 3/4	1 0	rts. Mar. 5 '96	1 0	100,000		2, Drapers-gardens.
" Star	3 3/4 3 3/4	3 3/4 3 3/4	1 0		1 0	170,000		1, Bank Buildings
Lisbon-Berlyn G	5/ 5/6	4/5 5/	2 1/2		0 2 1/2	283,233	Lydenburg	Suffolk House.
Lon. Paris Fin & M.	3 1/4 1	1 1/4 1 1/4	1 0		1 0	500,000		53, Old Broad Street
London & S. A. Es.	1 1/4 1 1/4	1 1/4 1 1/4	10/	4/- Sept. 3, '96	0 10	100,000	S. Africa ...	19, Finsbury-circus.
Lynsberg Vlat.	1 1/4 1 1/4	1 1/4 1 1/4	1 0	6 1/2 Mar. '90	1 0	319,000	Hand	Wernford-court. f.
Lydenburg Estate.	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	190,000	Lydenburg	35, Gracech. Street
Main Reef (New) G	3 3/4 3 3/4	3 3/4 3 3/4	1 0		1 0	111,500	Hand	15, George St., MnH
Marvalee Nigel	3 3/4 3 3/4	3 3/4 3 3/4	1 0		1 0	250,400		
Mashon. Agency	1 1/4 1 1/4	1 1/4 1 1/4	1 0	2/ Ap. 18 '96	1 0	100,000	Mashonald	8, Old Jewry, E.O.
" Central	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	110,000		
Matabele's G. R	3 3/4 3 3/4	3 3/4 3 3/4	1 0		1 0	110,000	Matabele's	3, Cophall-buildings
May Con. (New) G	2 1/4 2 1/4	2 2 1/4	1 0	2/- Mar. 18 '96	1 0	335,500	Hand	4, Lothbury-l
Meyer & Charl. G	5 3/4 5 3/4	4 3/4 5 3/4	1 0	5/ Feb. 13 '96	1 0	75,000		2, Bishopgate st. Wn
Minerva	5 1/4 7 1/4	5 1/4 7 1/4	1 0		1 0	150,000		Winchester House.
Mine Selection	2 3/4 3 3/4	2 3/4 3 3/4	1 0		1 0	100,000	Hand	33, Br'd St. Avenue.
Modderfontein. G	1 1/4 1 1/4	1 1/4 1 1/4	1 0	rts Aug. 28 '96	1 0	400,000		13, George Street
" B. Estens	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	325,000		28, Austin Friars
Moynne Consol.	3 1/4 3 1/4	1 1/4 3 1/4	1 0		1 0	200,000	Modderfont.	20, Bishopgate st
Moodies	9 3/4 9 3/4	3 3/4 9 3/4	1 0	-/4 May '90	1 0	240,000		Gresham House.
Mosambique	1 1/4 1 1/4	1 1/4 1 1/4	1 0		1 0	400,000	S. E. Africa	13, Austin Friars.
Namaqua	1 1/4 2	1 1/4 2	2 0	3/- July 15 '96	2 0	94,321	Namaquald	14, Leadenhall-bldg.
New African	1 1/4 2 1/4	1 1/4 2 1/4	1 0	5/ July 15 '96	1 0	190,000		53, Hatton Garden.
" Bullfontein D	1 1/4 2 1/4	1 1/4 2 1/4	1 0	1/- July 20 '96	1 0	150,000	Grigul'd W.	8, Drapers G-roads
" Chimes	3 3/4 3 3/4	3 3/4 3 3/4	1 0	1/- Mar. 27 '96	1 0	100,000	Hand	8, Old Jewry, E.O
" Comet	1 1/4 1 1/4	3 3/4 1 1/4	1 0		1 0	175,000	Heinsburg	Winchester-house.
" Cio up	3 3/4 3 3/4	3 3/4 3 3/4	1 0	rts Apr 17 '96	1 0	255,000		

AUSTRALIAN AND NEW ZEALAND MINES—(Continued).

EUROPEAN MINES.

Alamillos	L	1½	1½	1½	1½	2 0	2/- Sept 18 '96	2 0 0	35,000	Spain	8, Queen-street-place
Conssett Ore		7½	7½	7½	7½	1 0	5/- July 94	1 0 0	55,200	Spain	19, Grey-st, N'castle.
Fortuna	L	7½	1½	7½	1½	2 0	1/3 Sept 18 '96	2 0 0	25,000	Spain	" "
Libiola	C	1½	2	1½	2	5 0	2/- Sept. 30 '96	5 0 0	60,400	Italy	Dashwood Ho., E.C.
Linares	C	6½	6½	6½	6½	3 0	10/- Sept 16 '96	3 0 0	14,998	Spain	3, Queen-street-place.
Mason & Barry...C	2½	2½	3½	3½	5 0	5 0	21 Dec 11 '96	5 0 0	185,172	Portugal	87, Cannon-st.
Pestaneira	C	6½	7½	6½	7½	3 0	" "	3 0 0	67,808	Italy	6-7, Queen-street-l
Fontgibaud	SE	24½	25	24½	25	10 0	11/6 Dec. 5, '96	20 0 0	14,000	Coueron...	" "
Os Tinto	C	101	103	101	103	10 0	18/- Nov 3 '96	10 0 0	325,000	Spain	30, St. Swithin's-lane
" (1st Mr. Bida)		101	103	101	103	1 0	4½ Oct. 1, 96	10 0 0	£250,000	" "	" "
Riponjil	NQ	5½	6½	5½	6½	2 0	7/- Apr 29 '96	2 0 0	95,000	" "	" "
Tharsia	C Sud	5½	6½	5½	6½	10 0	2/- June 30 '96	10 0 0	1,500	Spain	120, Bishopst-gt, Wm
West Pros Pre. Pref		—	—	—	—	10 0	2/- June 30 '96	10 0 0	5,460	Spain	Glasgow.
" Prussian Fro.		—	—	—	—	1 0	4½ Dec. 31, '95	10 0 0	14,050	Germany	Walbrook Ho., E.C.
" Prussian Gr.		—	—	—	—	1 0	2/- Dec. 34	1 0 0	99,334	" "	" "
Wolffahrt	L	—	—	—	—	1 C	3½ Dec. '94	9 0 0	9,090	Prussia ...	17, Victoria-st., S.W

NORTH AMERICAN MINES.

Alaska Mexican...G	1 1/4	1 3/4	1 1/4	1 3/4	95	44-5d Oct. 28 '96	\$25	173,500	Alaska.....	30, St. Swithin's-In
" Treadwell...G	4 1/2	4 1/2	4 1/2	4 1/2	825	1/8 Oct. 28, '96	\$25	203,000	"	" "
Anaconda .....C	5 1/2	6	5 1/2	6	825	5 1/4 Nov. 3 '96	\$40	1,200,000	Montana...	" "
Arizona (Prof.) Cu	53/	53/6	54/	54/3	4 0	1/6 July 15 '96	4 0 0	158,920	Arizona ...	74, Geo.-st., Edinbor
" 6 1/2 A Deben.	110	110 1/2	110	111	100 0	5 Nov. 12 '96	100 0 0	2135,300	"	"
" 7 1/2 B Deben.	97		97		100 0	7 1/2 Nov. 12 '96	100 0 0	2181,300	"	"
De Lamar.....GS	11/	12/	11/	12/	1 0	1/- Nov. 12 '96	1 0 0	400,000	Idaho.....	6, Drapers-gardens,
Doric.....GS	5/	6/	5/6	6/6	5/		0 5 0	125,000	Colorado...	Broad Street House
Gen. M'g. Assoc. ...	8 1/2	8	5 1/2	6	5 10	12/-May 14 '96	5 10 0	27,469	C. Breton	Blomfield House,
Golden Feather ..G	3 1/2	3 1/2	4 1/2	4 1/2	1	—	1 0 0	180,000	California	S. Stephens Co E.O.
" Gate.....G	3 1/2	4/6	3/8	4/6	1	—	0 19 0	79,600	"	"
" Leaf.....G	/9	1/3	-7/3	1/3	1 0	—	1 0 0	300,259	Montana	8, Draper's Gardens
Hall Mines	1 1/2	1 1/2	1 1/2	1 1/2	1 0	—	1 0 0	250,000	Brit. Col.	1, Leadenhall St., E.O.
Harquahua... G	1/8	2/	1/6	2/	1	-6/Nov. 14 '94	1 5 0	300,000	Arizona ..	8, Draper's Gardens
Holcomb Valley G	/6		/6		3/		0 5 0	540,000	California	14, Cornhill, E.C.
La Yescra.....GS	—		—		1 0	—	1 0 0	200,000	Mexico ...	20, Bucklersbury, H.O.
Montana.....GS	3/6	4/	3/9	4/3	1 0	-3/June 26 '96	0 19 0	657,158	Montana	Gresham House, E.O.
Palmarejo .....GS	1/	1/6	1/-	1/6	1 0	—	1 0 0	418,988	Mexico ...	32, Old Jewry, E.O.
PinosAltos(Df)GS	—		—		1 0	-6/ Mar. ' 90	1 0 0	100,000	"	110, Cannon-street.
Richmond ...GSL	3 1/2	1	3 1/2	1	5 0	1/- Dec. 11 '96	5 0 0	54,000	Nevada ...	44, Coleman street,
Sierra Buttes ...G	3 1/2	3 1/2	3 1/2	3 1/2	2 0	-7/3 Apr. 29 '96	2 0 0	122,500	California	138, Leadenhall-st [
" Pumas Eur. G	3 1/2	3 1/2	3 1/2	3 1/2	2 0	-7/6 Oct. 29 '96	2 0 0	140,260	"	"
Springdale.....G	/3	1/3	-7/3	-7/3	2 1	-7/2 Sep. 28, '9	2 1	1,000,000	Colorado	20, Abchurch Lane
Twin Lake Placers	3 1/2	1	1 1/2	1 1/2	1 0	3/- Feb. '95	1 0 0	8,000	"	5, Lawrence P. Hl,

SOUTH AND CENTRAL AMERICAN MINES.

Anglo-Chilian F/V	8 8 1/2	8 1/2 8 1/2	10 0	7/- Dec. 11 '96	10 0 0	35,000	Antofagast	123, Bishopsgate-st W
" 4 1/2 Rylst MB	8 8 1/2	8 8 1/2	100 0	4 1/2 Nov 3 '96	100 0 0	£110,500	"	"
Argen. Concessions	—	—	2/	—	0 2 0	150,000	S. Luis ...	3 & 5, Queen Street.
Caylloma .....S	3/4 7/8	13/16 13/16	2 0	1/- Apr. 94	2 0 0	125,000	Peru	52, Leadenhall street
Colorado Nit. ....N	3/4 1 1/4	3/4 1 1/4	5 0	2/6 Dec. 16, '96	5 0 0	32,000	Chili	12, King-st., Liverp
Colombian Hy.....G	3/4 3/4	5/8 7/8	1 0	1/- Jy 28, '95	1 0 0	75,000	Colombia	15, Blomfield-street
Copapo	1 1/4 1 1/4	1 1/4 1 1/4	2 0	2/ May 29, '96	2 0 0	100,000	Chili	Dashwood House, N.
Darien "A"	5 1/2 5 1/2	5 1/2 5 1/2	1 0	—	1 0 0	49,553	Colombia	Manchester.
" "B"	6 1/2 7 1/2	6 1/2 6 1/2	1 0	2, u.w. Apr 29 '96	1 0 0	30,000	"	"
El Callao	3/4 3/4	3/4 3/4	5 0	9 1/2 Feb. '94	5 0 0	167,600	Venezuela	8, Bishopsgate-st, W
Frontino & B.....G	1 1/4 1 1/4	1 1/4 1 1/4	1 0	9d. Oct. 15 '96	1 0 0	123,662	Colombia	184, Gresham House
Glenrock	7/8 1 1/3	7/8 1 1/3	1 0	—	1 0 0	199,948	Arg. (& L.)	3-5, Queen-street, W.
Guadalupe	4/8 5/8	—	1 0	—	1 0 0	180,000	Honduras	14, Union st., Old Bld
Java'	—	—	2/-	—	0 2 0	105,269	Nicaragua	139, Cannon-street.
Lagunas	2 1/2 2 1/2	2 1/2 2 1/2	5 0	15 p.c. Dec. '94	5 0 0	120,000	Tarapaca	3, Gracechurch st;
Lautaro	5 1/2 6	5 1/2 6	5 0	5/- June 26 '94	5 0 0	110,000	Chili	70, "
Liverpool	8 8 1/2	8 8 1/2 x d	5 0	10/- Nov. 27, '96	5 0 0	22,000	"	Liverpool.
London Nit.....N	2 2 1/2	2 2 1/2	3 0	3 1/4 Nov. '85	5 0 0	10,000	"	9, Gracechurch-st.
" Nit.(Prof.)	3 1/4 4	3 1/4 4	5 0	2 Nov. 28 '85	5 0 0	22,000	"	"
New Julia	3 1/2 3 1/2	3 1/2 3 1/2	—	—	—	—	—	—
" Tarapagal N	3 1/2 3 1/2	3 1/2 3 1/2	1 10	1s. Dec. '94	1 10 0	130,000	Tarapaca	50, Lime-street, N.
" 8 1/2 Cum Frel	3 1/2 3 1/2	3 1/2 3 1/2	100 0	8 p.c. Feb. '96	1 10 0	130,000	"	"
" 8 1/2 Debs	7 1/2 8 1/2	7 1/2 8 1/2	110 0	6 p.c. Feb. '96	100 0 0	£260,000	"	"
Nueva Esperanza	7/8 1/	7/8 1/	5/	—	0 5 0	165,000	Colombia	5, Cophthai Build'g
Pac. & Jaspampa N	1 1/2 1 1/2	1 1/2 1 1/2	5 0	4/- May, '93	5 0 0	72,000	Tarapaca	3, Gracechurch-st.
Phoenix	7/8 1 1/3	7/8 1 1/3	10/-	—	0 8 0	406,000	S. Luis ...	3 & 5, Queen Street.
Rosario	4 1/2 5 1/2	4 1/2 5 1/2	5 0	3/- Aug. 13 '96	5 0 0	120,000	Chili ...	7 1/2 Old Broad-street
" (S 1/2 Deb.)	10 1/2 10 1/2	10 1/2 10 1/2	100 0	5 1/2 Oct. 1 '96	100 0 0	£475,000	"	"
" Hu' D' Serp	10 1/2 10 1/2	10 1/2 10 1/2	100 0	5 1/2 July 1 '96	100 0 0	£200,000	"	"
St. John del Rey G	5/8 1 1/8	5/8 1 1/8	1 0	2 1/2 Nov 13 '90	1 0 0	327,850	Brazil	Finsby Ho., Blm'f'd
San Donato ... N	3/4 1 1/4	3/4 1 1/4	5 0	2/6 May 24 '96	5 0 0	32,000	Chili	12, King-st., Liverp
" Jorge	4 1/2 5 1/2	4 1/2 5 1/2	5 0	5/- Oct. 15 '96	5 0 0	76,000	"	9, Gracechurch-st
" Fabio	1 1/4 1 1/4	1 1/4 1 1/4	1 0	5/- Oct. 30 '96	5 0 0	32,000	"	"
" Sebastian ... N	3/4 1	3/4 1	5 0	2/ July 15 '96	5 0 0	22,000	"	Dashwood House
Santa Barbara ...G	3/4 3/4	3/4 3/4	10/-	1/3 Dec. '86	0 10 0	60,000	Brazil	Liverpool
" Elena	3/4 3/4	3/4 3/4	5 0	5/- Nov. 15 '94	5 0 0	22,000	Tarapaca	3, Gracechurch-st.
" Mita	3 1/2 4	3 1/2 4	5 0	10/ May 29 '96	5 0 0	20,000	Chili	Dashwood House, S.
Tollma "A"	5 5 1/2	5 5 1/2	0	5/- Mar. 11 '96	5 0 0	14,000	"	13, Finsbury-circ
" "B"	3 1/2 4 1/2	3 1/2 4 1/2	0	8/- Mar. 12 '96	5 0 0	8,000	"	"

THE NORTHERN TERRITORY.

By Captain C. C. LONGRIDGE, M.F.I.M.E., M.I.M.E., &c.

GENERAL DESCRIPTION.

THE announcement of the Northern Territory Mining Scheme recalls to mind a gold field unpleasantly familiar in the early seventies. The exact position of these fields now, perhaps, requires some localising for most readers.

The Northern Territory itself comprises the country lying northward of the 26th parallel of south latitude, the line of demarcation from South Australia, and between the 129° and 138° of east longitude, the division from Queensland; together with the bays and gulfs, and all adjacent islands. This territory, estimated at 523,620 square miles, or 335,116,800 acres, was annexed to South Australia in 1863. It is watered by fine rivers—the McArthur, Roper, Walker, Goyden, Blyth, Liverpool, the three Alligator Rivers, the Adelaide, Victoria, and the Daly. Some of these are navigable to a considerable distance by ships of burden, and all by smaller boats. Much of the country between the river valleys is very rugged, and so cut up by ravines bounded by rocky walls as to be almost impassable. The chief town is Palmerston, situated on the eastern shores of Port Darwin, and now united by 150 miles of rail with Pine Creek and its mining camps, dotted over the auriferous ground that stretches away in a south-eastern direction.

Season and Climate.

In the northern portion of the territory the year is regularly divided into two climatic periods, the dry season lasting from May to the end of October, and the wet season extending from the end of October to the end of April, with an average rainfall of 62 inches. During the rainy months gullies and streams are often converted into impassable torrents, and the low ground with quagmires, over which travelling is arduous and transport impossible. Some difference of opinion exists as to the suitability of the climate for Europeans. It is, however, admitted that they cannot here do the same amount of constant work as in a more temperate climate, and that care is required to avoid intermittent fever, towards which miners in damp workings are easily predisposed.

Physical, Geological, & Mineralogical Characteristics of the auriferous districts are here briefly noticed. The most important of the gold reef localities now being worked—if the word can be legitimately applied—are Pine Creek, Brock's Creek, Howley, Woolwonga, Fountain Head, Jam Creek, Union, Eureka, and Maude's Creek—all lying, within 100 to 230 miles of Palmerston. This latter town is about 70 feet above low water, the country gradually rising to about 650 feet at Pine Creek, the commencement of the auriferous area, so far known. For the first 100 miles from Palmerston the mean ascent is 3 feet to the mile, for the next 50 it is over 8 feet to the mile. This is owing to the opening up of the ranges that are connected with most of the mineral deposits. These ranges are a series of parallel ridges, having a south-south-easterly trend, and rising to heights of from 200 to 300 feet.

Abstracting from the minor details of loam, clay, grit, red sandstone, crystalline limestone, &c., that overlie the bed rock, the whole geology of the Northern Territory is of a comparatively simple kind, and the formations are few in number. The most conspicuous, as well as the most common, is mica slate, of which the stratification is much jointed, fractured, and contorted. The rock in places is highly ferruginous, and at times contains much magnesia, with occasionally chlorite and mica; the latter as muscovite is very common near mineral lodes, and might almost be termed an indicator. The whole of the formation is palaeozoic, and probably of the same age as the auriferous slates and schists of Victoria, New South Wales, &c., there commonly known as Lower Silurian. In every part of these metalliferous deposits are dykes mostly of diorite. In addition, the country is interlaced with an abundance of dykes and veins of a greyish-blue flaggy rock of volcanic character and extraordinary hardness, resembling pholinite akin to the trachytes proper. The dykes are narrow and of great length, extending sometimes for miles. While the diorite dykes appear to have some connection with the gold, for they are often accompanied by singularly rich shoots of gold; those of the so-called pholinite seem of more modern origin, and in no way connected with the genesis of the precious metal. The quartz reefs generally, though not always, run along the summit of the ranges, of which they are, in fact, the nucleus. The gold reefs, for the most part, are of the usual character. There is, however, a great diversity in their dimensions. Some are several feet wide, while others are merely narrow leaders; but the latter are usually more defined, and, in proportion to their size, richer. As regards their continuity, the experience of 1870-72 points to the conclusion that while auriferous stone is found on the very surface of the ground the richness of the reef and leader decreases with the depth. In dimensions and richness the lodes are undoubtedly patchy. As regards the average value of the gold ore in this district, the official South Australian Red Book of 1894 states:—"No strict official record of the crushings from various districts has been kept, but it is estimated by the best authorities that the average yield of many thousands of tons taken from large reefs has been 9 dwts. to 18 dwts. to the ton, and the average yield from smaller reefs, varying from 1 foot to 3 feet, has been from 1½ ounce to 2 ounces per ton." Throwing in the chances of striking smaller reefs and leaders of phenomenal richness, the writer is inclined to average the value of the ore at not over 16 to 17 dwts. per ton, by far the greater proportion of which, at the low levels, which must now be worked, will be highly refractory and little amenable to either battery amalgamation or cyaniding. This refractory character—probably heavy iron and copper pyrites—of the deeper ore is fairly well indicated, not only by actual ascertained results, but also by the presence of other mineral lodes of silver, lead, copper, tin, iron, &c. All around this mining area is a belt of granite. Naturally the greatest mineral richness may be expected to occur at the edge or junction of the slates with the eruptive granite. It would rather seem as if silver, lead, and copper were the metals developed on the edge of this junction, while gold existed throughout the slate. Following the common rule, it is probable that the reefs on entering the granite become barren, but may resume their mineral character on returning to the country in which they conceived their origin. The presence of base metals in the immediate vicinity is an *a priori* argument for the refractory character of the gold ore below the oxidised surface.

Apart from the reefs there are innumerable alluvials which have been tried in a small way, but, owing to the patchy nature of the ground, with only varying success. There is some diversity of opinion as to the value of these alluvials, but the probability seems adverse to their profitable character. Fluvial conglomerates or drifts derived from the quartz lodes are fairly abundant. But their auriferous value is extremely doubtful. They have, says F. Tenison Woods, in his lifetime Govern-

ment Geologist, an ugly resemblance to what is termed the barren, miocene alluvial drifts of Victoria, in which gold is never found.

The Mines

Are represented by such groups as the Howley, Brock's Creek, Woolwonga, Eureka, Yam Creek, Mandi's Creek, &c. These mines have been described as "developed." But, for all mining purposes, the best developed is the least to be desired. For what is the history of these properties, and what the nature of their development? In 1870-72, in the hands of Europeans, these mines failed to pay expenses, and were subsequently mostly let out to the Chinese on tribute. Now, anyone that is the least familiar with Chinese mining, knows that it means the deterioration of the property for future work. Down to the water level, he rarely goes deeper, but above it, the Celestial sinks and burrows, fossicking and crevicing the ground in search of rich ore, until the whole surface is like a rabbit warren, and any attempt to open systematic workings is prohibited by questions of cost and danger. There is but one way to deal with such a property, and it is what will have to be done in the present instance—namely, to sink shafts below the Chinese workings and try deeper levels. This practically means attacking fresh ground, of the auriferous value of which little or nothing is known. In 1886, F. Tenison Woods was asked whether deep sinking would be likely to yield increased profit, and replied—"I should say there is nothing peculiar in the ground which would lead one to expect it."

Returning for one moment to history, we find that so far the upper level mining by Europeans has been a failure. For this *fiasco* of the past there were ample reasons in the great natural difficulties then existing. But, barring improved transport by the opening of the railway, these difficulties still exist. In fact, in one item, that of labour, the problem, owing to the practical prohibition of Chinese immigration, is more serious than ever. It is no exaggeration to say that when wet work begins, for which, even if it could be obtained, Chinese labour is unsuited, the importation of the necessary white labour in the measure required will enormously add to the costs of mining. Nor must it be forgotten that in a district of five months' tropical rain, work below the water level will entail pumping operations—adit drainage is not possible—that is unpleasant to contemplate. Another heavy item will be the iron and steel work required in lieu of the use of timber, which the white ant and the borer too greedily consume. These it is true cannot attack the metal, but this in its turn must rapidly deteriorate under the corrosion of the acid mine water known to exist. Fuel also, whether it be wood, coal, or oil, will form no small charge.

Though the main mining operations must be underground, below the water level, it may be thought that treatment of the vast quantities of tailings overhead will form a secondary but lucrative business. Should it prove so, it will be an unexpected though agreeable surprise. The Chinese miner who picks his ore with a view to easy extraction does not, as a rule, leave rich tailings, and the writer does not believe that more than one-tenth of the tailing deposits said to exist will be worth touching, and that such as are sufficiently rich will be exceedingly refractory.

The assets represented by existing plant has probably not much more than the value of old iron.

Conclusions.

First, to dispose of the argument that the Northern Territory Mines, having been exploited at a profit by the Chinese, must *à fortiori* prove profitable to a European company. The fact is, in such cases that the Chinese, as other natives, do not mine, but by carefully ransacking the ground for high grade ore and leaving the rest they can for a time make money, where systematic mining on a large scale could be conducted only at a loss. Chili, Bolivia, Mexico, &c., furnish innumerable examples in point, at times accompanied with disastrous results to European capitalists.

Secondly, considering the nature of the work in view, the cost of labour, heavy pumping through a large portion of the year, the necessity of substituting iron for timber, the price of fuel, and the probable highly refractory nature of the mineral, it is likely that some time to come the costs of mining, mine development, milling and treatment, management, depreciation, interest and amortisation will not be less than 40s. per ton of raw ore. Taking 16 dwts. fine gold as the mean value of the ore, and allowing 80 per cent. extraction, the result is about 40s. recovered for every 40s. expended. Under these conditions no company should start without a working capital of at least £40,000 to £50,000, and even with that guaranteed, the investment does not look very tempting. On the other hand, there is always the chance of discovering a new Eldorado.

BRITISH GUIANA'S GOLD INDUSTRY.

The R.M.S. *Eden*, which left Georgetown on the 11th, ult., took gold to the value of \$102,511.65. The shippers were:—

Colonial Bank ...	...	...	2430 11 0
British Guiana Bank ...	...	...	3231 15 0
Sproston, D. F. and Co. ...	...	...	108 0 12

Total ... 5770 2 12

The following are the returns of gold entered at the Department of Mines for the weeks ending:—

	November 7.	November 14.
Ozs. dwts. grs.	Ozs. dwts. grs.	Ozs. dwts. grs.
Barama...	19 4 15	89 9 14
Barima...	620 2 0	698 4 15
Cayani...	243 4 0	519 7 13
Demerara...	—	—
Essequibo...	512 14 5	523 14 14
Groote Creek...	57 13 15	24 17 16
Mazaruni...	—	18 14 18
Potaro...	622 13 14	1335 2 9
Parani...	350 6 21	62 18 21
Total...	2425 18 23	3502 10 0

Export of gold from January 1 to November 23:—

	Ozs. dwts. grs.	at
1896 ...	104,479 7 18	\$1,857,228.82
1895 ...	104,210 4 12	\$1,848,379.90

The MYSOBE REEFS (KANGUNDY) COMPANY (LIMITED) have sold the gold produced in October for £738 17s. 1d.

The NAMAQUA COPPER COMPANY (LIMITED) have decided to declare, at their meeting to be held on the 17th inst., an interim dividend of 1s. 6d. per share, free of income-tax, on account of the current year.

The directors of the NAMAQUA COPPER COMPANY (LIMITED) have decided to declare, at the meeting to be held on the 17th inst., an interim dividend of 1s. 6d. per share, free of income-tax, payable 24th inst.

The COROMANDEL GOLD MINING COMPANY OF INDIA (LIMITED) have sold the gold produced in October for £3033 Os. 8d.

"EL CALLAO" COMPANY.

THE report of the board of directors is as follows:—To the general meeting of "El Callao" Company, at its ordinary meeting, held April 16, 1896.—In our report to the extraordinary general meeting which took place on December 14, 1895, we stated to you, in detail, the situation in which the company was then. Now we give you an account of the operations effected during last year, which proves the correctness of the situation we then indicated to you. The result of the three mines we are working has been, in the year 1895, as follows:—

Mines.	Tons Crushed.	Ounces Produced.	Net Proceeds. (Bolivians.)	Expenses in El Callao (Bolivians.)
El Callao (Remington)	10,937	5,300.19	469,285 15	486,706 69
Colombia	36,519	15,335.93	1,388,500 58	1,458,739 04
Nueva Panama	9,829	3,864.95	356,717 88	564,009 42
	57,285	24,501.07	2,214,503 61	2,509,455 15
Differences of expenses				291,951 54

The expenses are those caused at the mines, but there are others, the account whereof is kept in the office, which are those of administration, taxes, purchase of material, freightage, &c., which are not less than difference between the proceeds ... 330,000

and the expenses ... 641,951 54

The difference has come out of the reserve we had on January 1, 1895, in money and articles warehoused.

The whole of this difference is not a loss, for therein appear:—

Debt of the Nueva Panama Company ... 327,666

Invested in railways ... 101,781

Total ... 429,447

The details of all the expenses you will find in the report of the superintendent of the works, and in the statements we annex. During the year 1895, seeing that all the reserve fund was exhausted, and the mines did not improve, we have done all possible to obtain a loan, with the object of giving a greater development to the works, but without favourable results. Our confidence in the successful issue which would follow this loan was founded, and it still founded, upon this calculation:—

In 1895, 57,285 tons of ore have been treated

which have produced ... 2,214,503 61

There has been expended ... 2,509,455 15

Difference, which we take as loss ... 641,951 54

We have abundance of ore, approximately of the same type as that crushed in 1895.

Our purpose was to increase the works to the extent of doubling the amount of ore treated, after giving a certain development to the mining workings; and on the machinery being completed, this can be done, increasing the expenses by 50 per cent. The result would be this:—

Quartz: 114,570 tons; product ... 4,429,007 22

Expenses: all those incurred in 1895, increased by 50 per cent. ... 4,294,887 22

Result ... 144,320

This result would be insignificant compared with the magnitude of the undertaking, but applied to the million of bolivians asked for, it is sufficient. As regards the undertaking in general, it is equipped, and costs many millions, which are in peril of being lost if the works are stopped. The million which is asked for is to maintain the works in activity, and to extend them, with the hope that it will be able to repay the million and its interest, and so save the undertaking; and if this should not succeed, the borrower would remain with it, and we believe that they would not ultimately lose. But if we base our calculation on the product of 24,501 ounces during the year 1895, as well as the million of bolivians, we should extend the works, at least as regards four mines—the Remington, Nueva Panama, Colombia, and San Felipe. Our hope would be to meet with better ore in some of them—a hope which we believe to be well founded. But in order that the undertaking should not die out, there must be taken into account the great extension of mineral lands which it possesses, the works already carried out, and the material which it has erected for the working. We have against it the expenses, which are very heavy, and it is difficult to reduce them.

We have suspended the payment of the remuneration of the board of directors, and to one-half that of the other employees of the office; but in spite of all these reductions the undertaking could not exist with a production of more than 2000 ounces of gold per month, the average of the year 1895, but the conditions of the country thus require it in the present circumstances, although there are reasons to believe that they will improve.

During the three months already past of the present year the result of the works has been in the three mines which we are working:—

12,437 tons ... 5250.35 ounces ... 462,030 ... 589,957

We have a deficit of ... 127,927

The situation is very trying. If we stop the works, our belief is that the undertaking is lost, as regards the shares of El Callao, and if we continue them without quickly meeting with better ore we shall go on to bankruptcy and judicial liquidation; and in any case it is a loss for the shareholders of the El Callao. Not being able to count upon a loan, risking the continuation of the workings on the chance of discovering better ore is the only hope of salvation which remains to us. Upon this the board of directors desires a resolution of the general meeting. The plain and frank exposition of the situation which we make permits the meeting to pass a resolution with a knowledge of the matter. The deficit which the months of February and March have left us we owe almost in its entirety to the employment of workmen, who have been in the service of the company for many years.

It is possible that if we continue paying the two-third parts of the expenses in cash, the employees and workmen will remain with us two or three months longer, for they know the plan of the workings which we are following, and they have confidence in it. If we were able to inspire a part of the confidence which they have to the influential shareholders, or to the capitalists who risk money in gold mining undertakings in hope of big gains, we should have obtained the loan for which we are now asking many years ago; for it may be asserted that in the gold mining world there is no undertaking which offers the guarantees ours offers, nor which has in sight the elements ours has for showing the probabilities of the successful result of a loan.

The administration has been known for more than 25 years, and has distributed increased dividends during the time it worked the mine as a bonanza; but it has not been possible to inspire confidence to obtain a loan to carry on new works after the exhaustion of the rich mine El Callao.

The board of directors comes before you with the consciousness of having made every effort in its power to sustain the company, for want of pecuniary help, there is a breakdown, it will not be their fault, for want of having done everything possible to avoid ruin.

The CHAMPION REEF GOLD MINING COMPANY OF INDIA (LIMITED) have sold the gold produced in October for £30,551 13s. 7d.

The OOREGUM GOLD MINING COMPANY OF INDIA (LIMITED) have sold the gold obtained in October for £18,958 18s. 4d.

One half of the under-mentioned issue is reserved for preferential subscription, at the present issue price, by the Shareholders in the companies constituting the Northern Territories Syndicate, Limited, viz.:-

West Australian Gold Fields, Limited; The West Australian Joint Stock Trust and Finance Corporation, Limited; The London and Continental Investment Corporation of Western Australia, Limited; The West Australian Share Corporation, Limited; The Gold Lands Corporation, Limited; The Colonial Gold Fields, Limited; The Universal Corporation, Limited; The West Australian Loan and General Finance Corporation, Limited; The Anglo-American Exploration Company of Western Australia, Limited; The Anglo-Belgian Exploration Company of Western Australia, Limited; The Anglo-Netherlands Exploration Company of Western Australia, Limited; The Anglo-Scandinavian Exploration Company of Western Australia, Limited; and The Anglo-Austrian Exploration Company of Western Australia, Limited.

The West Australian Joint Stock Trust and Finance Corporation, Limited; The New Zealand Joint Stock and General Corporation, Limited; and The West Australian Loan and General Finance Corporation, Limited, having, in conjunction with others, by purchase and otherwise, acquired the right to issue the undermentioned Shares, now offer the same for sale by public subscription.

THE NORTHERN TERRITORIES GOLD FIELDS OF AUSTRALIA, LIMITED.

CAPITAL -

£300,000,

Consisting of 300,000 Shares of £1 each, of which 225,000 Shares have been issued as fully paid, as the Purchase Price of the Properties acquired, and 75,000 have been subscribed to provide Working Capital. The latter are at present only partly paid up, but in order to prevent any confusion arising, the Directors have agreed to accept payment in full, so that all Shares will then be of one description.

Applications are now invited for 295,000 fully paid Shares at £3 per Share, payable 5s. per Share upon Application, 15s. on the 18th December, 1896, £1 on the 15th January, 1897, and £1 on the 15th March, 1897.

Applicants may pay up in full at any time in advance of the above dates.

DIRECTORS.

ROBERT SMITH (Director African Gold Recovery Company, Limited), Chairman.
SIR CHARLES CHAPMAN, Bart. (Director, West Australian Gold Fields, Limited).
ROBERT B. TETLEY (Director, Associated Gold Mines of Western Australia, Limited).
HENRY W. LOWE (Director of the London and Continental Investment Corporation of Western Australia, Limited).
HENRY G. BLADE, F.R.G.S.
EDWARD HEASMAN (Director, Block 50, Hampton Plains Estate, Limited), Managing Director.

BANKERS.
PARR'S BANK, LIMITED, Bartholomew Lane, London, E.C., and Branches.
SOLICITORS.
DAVIDSON and MORRIS, 40 and 42, Queen Victoria Street, London, E.C.
AUDITORS.
MONKHOUSE, STONEHAM, and CO., 28 and 29, St. Swithin's Lane, London, E.C.
OFFICES AND SECRETARY.
D. R. TASMAN, 5, LAURENCE POUNTNEY HILL, London, E.C.

ABRIDGED PROSPECTUS.

MACHINERY AND MANAGEMENT.

This Company was incorporated in July, 1896, for the purpose of taking over from the Northern Territories Syndicate, Limited, six extensive groups of developed and working gold mines situated in the Northern Territory of South Australia, together with a large quantity of plant and machinery, and upwards of 50,000 tons of tailings.

THE NORTHERN TERRITORY.

The Northern Territory is the name given to the northern portion of South Australia, and comprises 531,402 square miles, or 340,097,280 acres. The Territory is administered under Letters Patent from the Imperial Government by South Australia, and immediately adjoins the Colony of Western Australia. Palmerston is the principal town, whilst there is a magnificent harbour at Port Darwin. There is a railway from Palmerston to Pine Creek, a distance of 150 miles, which cuts right through the gold-bearing district, and is within a short distance of this Company's properties. The goldfield may be said to begin at 10 to 15 miles south, and to extend, as far as is at present known, some 100 miles south, its breadth being 50 or 60 miles, so that it covers an area from 10,000 to 12,000 square miles. Water and timber are abundant. The climate is tropical, but epidemics of a serious nature are practically absent.

THE NORTHERN TERRITORIES SYNDICATE.

The Northern Territories Syndicate, Limited, was constituted by a combination of the following Companies:-

West Australian Gold Fields, Limited.
The West Australian Joint Stock Trust and Finance Corporation, Limited.
The London and Continental Investment Corporation of Western Australia, Limited.
The West Australian Share Corporation, Limited.
The Gold Lands Corporation, Limited.
The Colonial Gold Fields, Limited.
The Universal Corporation, Limited.
The West Australian Loan and General Finance Corporation, Limited.
The Anglo-American Exploration Company of Western Australia, Limited.
The Anglo-Belgian Exploration Company of Western Australia, Limited.
The Anglo-Netherlands Exploration Company of Western Australia, Limited.
The Anglo-Scandinavian Exploration Company of Western Australia, Limited.
The Anglo-Austrian Exploration Company of Western Australia, Limited.
The combination was the result of extensive investigation into the mineral wealth of the Territory, which was reported by eminent authorities to be of an exceptional character. These reports having been confirmed by its own experts, the Syndicate took up the above-mentioned properties, and subsequently made over them to this Company, not only taking the whole of its purchase price in Shares, but also providing £75,000 as Working Capital.

The Directors of this Company thereupon ordered a large quantity of new and improved machinery, which is now on its way to the Territory, and have also appointed Mr. W. J. E. De Müller (late Chief of the Royal Mining Department, Siam), as Engineer and General Manager; and Mr. D. D. Rosewarne (late Government Inspector of Mines for South Australia), Assistant Manager of the mineral properties thus acquired. Mr. De Müller has been in London for some time past in connection with the purchase of the new machinery for the Company, which has been specially designed by Mr. Jonathan Packmann, M.I.C.E., and constructed under his personal supervision, whilst Mr. Rosewarne has returned to the Territory with a large staff of miners, and has commenced active operations at the mines. The whole of the groups are being fitted with a complete telephonic system.

NAMES OF PROPERTIES.

The properties acquired comprise nearly seven hundred acres, and are locally known as the Howley Group, Brook's Creek, Woolwonga, Eveleen (including the Eureka Mine), Yam Creek, and Lady Alice Union District groups. They extend along a line of main reef for a distance of about ten miles, and have been worked in a spasmodic and unscientific manner for some years past by Chinese labour, the following being some of the results of crushings prior to the formation of this Company, as vouched for by official records:-

PAST CRUSHINGS.

Group 1.—Government reports show the results of crushing of over 5,000 tons from this group. These crushings average 3 oz. per ton, whilst the following are the latest returns obtained from six crushings taken from the 150 ft. level.

Crushings.	Tons.	Ounces.
No. 1	72	378
No. 2	118	412
No. 3	83	167
No. 4	14	60
No. 5	44	265
No. 6	33	190

The last two returns have thus yielded over 5 ounces per ton. This reef is now 4 feet wide at face.

Group 2.—A crushing of 10 tons from the Alligator Mine (on this property) has given the phenomenal result of 3,000 ounces; whilst a large crushing of 6,000 tons realised 17,000 ounces of gold.

Group 3.—A crushing of 4,300 tons of surface ore only from this property has yielded 3,500 ounces.

Group 4.—A crushing of 1,200 tons from the main shaft of this property has yielded 3,300 ounces.

Group 5.—A crushing of 250 tons from this property has yielded 516 ounces.
Group 6.—A crushing of 120 tons from this property has yielded 633 ounces of gold. Another crushing yielded 4½ ounces of gold per ton.
The above results are independent of gold left in the tailings, which have in some cases yielded assay results of a remarkable character.

SUBSIDIARY COMPANIES.—SEPARATE WORKING CAPITALS ALREADY GUARANTEED.

It is the intention of the Directors of this Company to further develop the properties, equip them with more modern and efficient plant and machinery, and generally to act upon the lines of a parent undertaking, with a view from time to time to forming subsidiary companies to take over the various groups. Two of such companies will be issued at an early date, a separate working capital of upwards of £13,000 for each having already been guaranteed by Western Australian Gold Fields, Limited, the West Australian Joint Stock Trust and Finance Corporation, Limited, the London and Continental Investment Corporation of Western Australia, Limited, the West Australian Share Corporation, Limited, the Gold Lands Corporation, Limited, the Colonial Gold Fields, Limited, the Universal Corporation, Limited, the West Australian Loan and General Finance Corporation, Limited, the Anglo-American Exploration Company of Western Australia, Limited, the Anglo-Belgian Exploration Company of Western Australia, Limited, the Anglo-Netherlands Exploration Company of Western Australia, Limited, the Anglo-Scandinavian Exploration Company of Western Australia, Limited, and the Anglo-Austrian Exploration Company of Western Australia, Limited, and the original Vendor.

GOVERNMENT SUBSIDY.

The Government of South Australia has promised a bonus of £10,000 to the first Company sinking an aggregate of 2500 feet in shafts of not less than 300 feet, and it will be the aim of this Company to obtain such grant at an early date. Mr. Rosewarne recently confirmed this in the following cable:-

"The Government will grant £10,000 to be paid as a bonus to sink, if the scheme is carried out, new timbers throughout 2500 feet vertical."

As will be seen from the Report of the Hon. Chas. Dashiwood, Resident Governor of the Northern Territory, this Company already has "numerous shafts sunk on the vein, varying in depth from 50 to 300 feet."

APPLICATIONS FOR SHARES.

Applications for the purchase of Shares (which will be conditional upon acceptance by the issuing Companies) may be made on the form accompanying the prospectus and forwarded to Parr's Bank (Limited), Bartholomew Lane, London, E.C., or any of its Branches, together with a remittance for the amount payable on application.

Full Prospectuses and Forms of Application may be obtained from the Bankers and Solicitors, and at the Offices of the above Companies, Finsbury House, Blomfield Street, London, E.C.

MINING IN CORNWALL AND DEVON:

NOTES ON MINING IN THE WEST.

(FROM OUR OWN CORRESPONDENT.)

THE East Pool and Wheal Agar affair is once more the subject of general discussion after one of those intermittent and somewhat prolonged lulls which have characterised the whole of the dispute. Matters had arrived at a point when the next move was obviously out of the hands of either side, though it was equally clear that Lord Robartes, having carried the thing so far as he had done, was compelled to continue his policy, and serve the necessary notices on his late leaseholders, Wheal Agar shareholders. He had under the lease the right of pre-emption, and he was entitled to make an offer for the machinery, or even to take it compulsorily at a valuation. We understand that his lordship has made an offer of £2500 for the machinery, and has served notices requiring, in default of the acceptance of these terms, the removal of the machinery from the mine within three months. The offer of £2500 must have come as an eye-opener to Mr. Hattersley, and it certainly is low compared with the offer which was practically made at one time of £6000, but we shall not be surprised to hear that even this has been declined, and the unfortunate shareholders may yet have to pay for carting their engine away as old iron. Wheal Agar executive must realise that they are on the horns of a dilemma. They, of course, need not sell to Lord Robartes, but if they do not they must remove what they have on the mine within three months. If they adopt the former course they are admitting that they have had the worst of a commercial transaction with the neighbouring mine—and there can, of course, be no question but that the £2500 is really East Pool's offer—and if they adopt the latter they must begin to dismantle at once. The cost of removing such machinery would be considerable. They have got themselves into a mess, apparently, unless, of course, there are some legal points of which we have yet heard nothing. It looks very much as though the Agar sett will very soon be in the hands of East Pool, but the important consideration now is as to what can be done with it when they have it. There will have to be some financial arrangements in order to put the thing in working trim, and we fancy these are already being talked over by the committee. It is an open secret that a good number of shareholders in East Pool do not want to, and will not, put their hands very deeply into their pockets to provide capital; but our opinion very strongly is that if they do not care to do so, there are many outside who would willingly invest in a big scheme under Limited Liability. The scheme undoubtedly should include the sets of East Pool, Wheal Agar, South Crofty, and New Cook's Kitchen, and they would form one of the best speculations in the County of Cornwall.

CANN BREA and Tincroft directors have not yet met to consider the advisability of suspending stopping operations, as advised by Mr. Foster Brown and Captain Teague. It is understood that a meeting will be held, when Mr. Frank Harvey, the Chairman, returns from Africa next week. The wisdom of the stop is gravely questioned in many quarters. A number of the men have been discharged from the mines during the last week, and the present outlook is anything but cheerful.

At the Basset Mines the prospects are more hopeful than in most of the neighbouring concerns. The bottom is opening up well, and with a slight rise in tin the payment of handsome dividends at an early date would be assured.

BLUE HILLS is hardly looking so well as it was a few months ago. It is hoped, however, that the 100 fathom level, which is being driven by nine men and three boys, will soon improve.

CORRESPONDENCE.

"We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the writers, though these need not necessarily be published."

THE ZYMEAN PROCESS.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—I read a letter in your issue of December 5, signed Donald Clark, B.C.E., School of Mines, in which he comments upon the Zymean process, and states—"The fermentation theories put forward are utter nonsense."

You have been good enough to publish several letters of mine upon this subject, in which I have endeavoured to show that the process, if intelligently and correctly worked, will do what it claims to do—i.e., extract all the metals from an ore quickly and at small cost, the ore being a refractory one or otherwise.

I have myself arrived at this conclusion after having frequently seen it done by others, and having myself worked ores with perfect success.

From the wording of the last paragraph of Mr. Clark's letter I am led to infer that he has as yet never tried the Zymean process—i.e., not properly.

As to the fermentation theories, it may be called fermentation, chemical action, or what you please—"a rose by any other name will smell as sweet." All I can say is, that upon the addition of the sulphur chloride to the properly made solution of salt and water, the ore having been placed in it with sulphur, present either in the ore or added, a commotion, we will call it, shortly occurs. Water is decomposed into H and O, which form fresh combinations. The result is, free nascent chlorine is produced, hydrochloric acid gas given off, &c., and ultimately all the metals of the ore will be found in the solution as chlorides.

The principle in all cases is the same, though there may be some little variation required in its mode of application owing to differences in the composition of ores. I will just mention one case in illustration of this which I have heard of. An ore having a certain combination of sulphur, and that sulphur a large percentage, did not succumb kindly to the process. How was this met? Simply by adding more sulphur, when the metals came out at once. I am not explaining this: I am simply stating facts. The result is, I take it, the important factor.

I trust Mr. Clark will try again, but try properly, and he will not then be disappointed.

December 6.

M. TWEEBIE, Major-General.

GOVERNMENT AID FOR THE MINING INDUSTRY OF CORNWALL.

TO THE EDITOR OF "THE MINING JOURNAL."

DEAR SIR,—You kindly inserted my previous letters on this great subject in your valued Journal. I venture again to ask you to insert this.

I will then leave the matter with the working miners of Cornwall—to those out of employment, to those receiving relief from the distressed miners' fund, to the gentlemen forming that committee, to the excellent men who represent this county in Parliament, to all Cornish men, to the whole of the people of this kingdom who desire the well-being of our working miners, everywhere at home, and may combined efforts and influence induce our Government to take the same interest in the toilers in our mines at home as our colonies do for them abroad.

Unless the Government give substantial aid, metalliferous mining will vanish away, and the few thousands now employed will be added to the now great number of destitute miners too poor to leave the country, and too weak from want of proper food to do a day's work, too independent to fill the workhouse, and their broken down course taking them silently to the grave. Cornishmen to the rescue!—Yours obediently,

R. H. WILLIAMS.

LEAD AND BLENDE MINING IN CARDIGANSHIRE.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—I have carefully perused the letter of "Miner" in your valuable Journal of the 28th ult., and I fully agree with his remarks in reference to the future prospects of lead and blende mining in Cardiganshire.

It is well known that the mines in this county can be inexpensively developed by water power, which is in abundance.

There are other very attractive properties, independent of those named in "Miner's" letter, which are deserving the attention of capitalists. Further information may be obtained, if required, from yours very truly,

H. W. FRANCIS.

Pembont, Bow-street, R.S.O., Cardiganshire, December 9.

PUBLICATIONS RECEIVED.

"Whitaker's Almanack, 1897." By John Whitaker, F.S.A. (London: 12, Warwick Lane, E.C.)
"The Civilisation of Our Day." A series of original essays on some of its more important phases at the close of the 19th century. By Expert Writers. Edited by James Samuelson. Illustrated with maps by Stanford, portraits in photopavre and woodcuts, &c., in text. 16s. net. (London: Sampson, Low, Marston, and Co., St. Dunstan's House, E.C.)
"The Westralian Gold Fields." By Barton S. James, F.G.S. (London: 18, Billiter-street, E.C.)
"The Engineering Magazine."
"Journal of the Western Society of Engineers." (Chicago: 1737, Monadnock Block.)
"Compressed Air Illness." By E. Hugh Snell, M.D., B.Sc. Lond. 10s. 6d. (London: H. K. Lewis, 136, Gower-street, W.C.)
"A Scheme for the Regulation of the Output of Coal by International Agreement." By Emile Lewy. (London: Crosby Lockwood and Son, E.C.) Price 2s.
"A Scheme for the Regulation of Coal by International Agreement." By Emile Lewy. 2s. (London: Crosby Lockwood, 7, Stationer's Hall-court, E.C.)

REPORTS FROM THE MINES

	1991	1992	1993	1994	1995	1996
	Ozs. dwt.	Ozs. dwt.	Ozs.	Ozs.	Ozs.	Ozs.
January ..	85,205 15	84,560 8	109,374	149,814	177,463	156,715
February ..	50,079 2	86,649	93,232	151,870	180,266	162,000
March ..	52,949 1	93,244 11	110,474	185,372	184,945	173,730
April ..	55,371 18	95,562 6	122,053	169,745	198,350	168,000
May ..	64,673 1	99,426 6	116,911	169,773	203,941	192,000
June ..	58,883	101,252 3	132,907	168,162	199,493	202,000
July ..	64,924 10	110,279 1	126,199	187,953	203,973	225,000
August ..	59,070 4	102,322 3	136,089	174,977	194,704	194,000
September ..	65,601 8 1/2	107,851 13	129,585	176,107	191,910	188,000
October ..	72,793	114,187 0	138,999	173,378	195,218	—
November ..	73,393 15	105,734 16	136,640	182,304	178,490	—
December ..	80,312 11	170,748 17	146,357	175,081	178,490	—
	729,337 2 1/2	1,120,965 1	1,478,473	2,024,159	2,377,635	2,000,175

NEW ZEALAND.

NEW ZEALAND.

TARARU CREEK.—The acting manager reports under date October 23:—
It is with great pleasure that I have to advise you of a marked improvement in your mine, which, if not immediately making itself apparent in the output of bullion, will do so in a very few weeks. In the first instance the battery level has been extended 50 feet beyond any work that was done in the old workings, and already there is so great a change for the better in the country

to - feet 6 inches, total 13 feet. Lode 1 foot wide, assay value 1 dwts. Wallrothe shaft.

The rest is from 4 to 6 inches in width, composed of schist, quartzite, and primitive, a sample from which gave by assay 4 dwts. 8 grains. The 1250 feet level north driven 12 feet. R-of in this direction very small and of no value. The 160 feet level north driven 9 feet 3 inches, total 482 feet 9 inches. Lode carries small and very few grains. No sample taken. The 1.60 feet level north driven 13 feet 2 inches, total 453 feet 11 inches. L-de 3 inches wide, assay value 1 dwts. 8 grains. The 980 feet level north driven 11 feet 3 inches, total 321 feet 3 inches wide, assay value 12 dwts. The 760 feet level north driven 6 feet 3 inches, total 3 inches wide, assay value 5 dwts. 6 grains. No sample taken. The 710 feet level north sunk 3 feet 8 inches, total 47 feet. Lode 1 foot wide, assay value 4 dwts. 4 grains. No. 2 rise 58½ feet north commenced and risen 5 feet 9 inches. Lode 1 foot wide, assay value 2 dwts. 1 grain. This is intended to communicate with No. 8, mine from 460 feet level north. The 460 feet level north driven 14 feet, total 487 feet 6 inches. Lode 3 inches wide, assay value 1 ounce 1 dwt. 11 grains. No. 2 mine 460 feet level north driven 2 feet 9 inches, total 83 feet 9 inches. Lode small and of no value. The 235 feet level north driven 9 feet 1 inch, total 8 inches wide, assay value 1 ounce 3 dwts. 11 grains. No sample taken on either side of the lode carries a soft schist, Sookan, and pyrites of iron. Characteristic character, hence a sample was taken from it, which gave by assay 2 dwts. 13 grains. Gold per ton. The 215 feet level north driven 11 feet 3 inches, total 614 feet. Lode mixed, and of no value. Low's shaft sunk 13 feet, total depth 940 feet level north, and of no value. The 910 feet level south to intersect reef driven 2 feet 3 inches, total 43 feet 11 inches. The 810 feet level south from point of intersection driven 19 feet 3 inches, total 354 feet level south. Lode small, no sample taken. No. 1 mine 810 feet level south driven 10 inches, total intersection sunk 1 foot 8 inches, total 37 feet level south sunk 1 foot wide, assay value 4 dwts. 8 grains. No. 2 mine 810 feet level south from point of intersection sunk 3 feet, total 21 feet. Lode 12 feet 8 inches, total 354 feet. Branch of quartz contrasted and of no value. No. 1 mine 710 feet level south sunk 1 foot 3 inches, total 80 feet 6 inches. Assay value 1 foot 6 inches wide, assay value 7 dwts. 15 grains. No. 3 mine 710 feet level south sunk 1 foot 9 inches, total 7 dwts. 15 grains. No. 3 mine 710 feet level south sunk 6 dwts. 12 grains. No. 2 mine 510 feet level south sunk 1 foot 9 inches, total 65 feet. Lode continuous small.-Probyn's drift, 10 feet level south driven 6 feet 6 inches, total 314 feet 6 inches. Lode 3 inches wide, assay value 4 dwts. grains. No. 1 mine 1000 feet level south sunk 1 foot.

WESTRALIA AND EAST EXTENSION.—The following is the mine manager's report for the fortnight ending 30 October 20.—*Issues* 144, No. 4 shaft. Number of men at work, 10; total depth 188 feet. *Lode* 5 feet thick, with slight increase 5 dwts. The lode still maintains its width and strength, with slight increase of pyrites. We have about 7 feet more to sink to reach the depth required for second level.—No. 8 shaft, second level. Number of men at work, 10; *issues* 2 dwts. 10, total depth 17 feet. *Lode* 1 foot 6 inches thick, *issues* 1 dwts. 10. In value, in future up to the level of the second level, it is estimated that the mine will produce 100 tons of ore per ton to make good progress in the driving of this level, as during the fortnight the men have been taken away to perform odd jobs.—*Water* 100 gallons. Number of men at work, 30; total depth 182 feet. Since the water has decreased from 360 gallons in 24 hours to 185 gallons, it is not necessary to regret, after several weeks ponding, we discovered which was inadequate for the purpose of the mine. We, therefore, should like to see the water sink to sink this shaft a further depth of 50 feet, which is now being accomplished, with the hope of obtaining a larger supply; but, judging from the appearance, the water does not increase as depths reach, and in a few days we think one would naturally expect it to do. In the course of the next few days we will be able again to test the quantity that the mine can produce. It is estimated that the water from a spring has been solely derived from the surface of the mine, and from a spring, watercourse, but is simply a deposit of water from the quantity we draw from this deposit (which might also be called a deposit of water) and diminishes. However, we hope, in sinking another level, that the water will be in a granite, to meet with an increase in the quantity of water, and that the No. 20 shaft will be in a granite, to meet with an increase in the quantity of water, and that it is evident that the diorite has made

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* A Paper read by Captain N. Trestrall, Assoc.M.Inst.C.E., before the Mining Association and Institute of Cornwall.

with the compound was 95 millions. In 1843 Taylor's engine again did a very high duty, averaging 99 millions for the year, the highest being 105, Sims compound having fallen to 87. This year was the highest average for the whole of any year recorded, showing 57 millions, and for December the highest monthly average ever recorded, 60 millions.

Although Taylor's engine did a splendid performance for 1841-2-3-4, averaging 97.5 millions, the best six engines during the same period averaged only 75 millions; so that for the four years Taylor's did 23.5 per cent. better than six of the best. From this time the duty of the best engines began to diminish, having worked almost to breaking strain, and the engines and pitwork not having been made heavy enough to stand the strain of such high expansive working, the duty naturally fell away, and although the better duties diminished the lower ones gradually improved, so that the average duty kept about the same. In 1847, Taylor's engine had fallen to 87 millions, and the best six averaging only 63, and for some reason or other for the month of May the duty was reported for the first time in two columns, one representing that done by the bushel, and the other showing an equivalent if computed by the hundredweight. This year was somewhat remarkable in engine reporting, as I find that, in 1845, Mr. West's engines, including the Fowey Consols, had fallen a long way below the best, and he withdrew all his engines from Lean's reporter.

In January, 1847, the first *Monthly Cornish Engine Reporter* appeared in opposition to Lean's, reported and published by a Mr. Browne, of St. Austell. This reporter was almost monopolised by the West's, and in carefully looking over one of these I should say the gentleman responsible for its production was very compliable, as you will judge from the following, and taken from Brown's reporter:—

Where the steam pipes and boilers are left uncovered for the purpose of drying the men's clothes, the following deductions are made from the actual consumption of coals:—

Engines working under two strokes per minute... 1-7
Engines working under three strokes per minute... 1-8
Engines working three and under five strokes per minute... 1-9
Engines working above five strokes per minute... 1-10

Whatever allowances were made, I find that Mr. West's engines rapidly increased in duty on the issue of this new reporter, and no doubt the calculations for allowances were made very minutely for the varying number of strokes, but there is no data given as to the mode of arriving at these deductions.

This reporter did not find much favour outside Mr. West and the publisher and the publication has long ceased to exist. The high duty of some of the best engines as reported by Lean gradually declined, so that in 1851 the celebrated Taylor's engine was only 62, and ceased to be reported. In 1853 Sim's compound at Carn Brea fell to 42. At this time a new Sim's compound was erected at Perran St. George, cylinders 60 inch horse power, 100 inch l.p., stroke 9 feet in the cylinder, and 8 feet in the shaft, but this engine did very badly as compared with Carn Brea, the highest duty recorded being 64 millions.

In 1854-5 the average duty of six of the best engines was 60 millions, and the average of the whole 45.5. 1856 was another important year, as in July the bushel was dropped altogether, and the hundredweight adopted as a standard. This great change did not affect the average duty, and from that time to the present the average duty of the best, and the average duty of the whole, has been just the same.

How much reliance can be placed on the weight of a bushel of coals that was measured, and supposed to weigh 94 lbs., I can hardly say. In 1838 I find that Mr. Wicksteed was requested by the Council of the Institute of Civil Engineers, to obtain information as to the weight of coal adopted in this county, and Mr. Nicholas Harvey, a well-known engineer, said "a bushel of Welsh coals varied from 80 lbs. to 112 lbs.," and a foot note in Wicksteed's paper says: "This statement shows how little reliance can be placed upon results of trials where coal is measured and not weighed. If the measure is large enough to hold 112 lbs. of coal it should no longer be denominated a bushel." However, if the measured bushel contained 112 lbs. of coal previous to 1856, taking the number of engines reported and the conditions under which some of them worked, it must be considered even by the most prejudiced engineer that good work was done.

By tracing Lean's engine reporter I find some rather curious things respecting the performances of a few engines. For instance, a 70 inch engine in 1864 at Crane Mine varied 21½ millions throughout the year; Tilley's 70 inch at Wheal Seton, 20 millions in 1865; Unity Wood 70 inch, 24 millions in 1876; Tregartha Downs 80 inch, 23 millions in 1887; East Pool 70 inch, 21 millions in 1891; Good's 80 inch, Wheal Granville, 29 millions in 1893; but the most astonishing was Thomas' 60 inch at West Basset, which varied during 1895 from 61 the highest to 28 millions the lowest. This, in my opinion, goes to show that the performances of engines cannot be fairly compared unless the quality of the fuel is tested at the same time, because there is no reasonable cause why such great fluctuations should take place. In fact, Thomas' engine at West Basset being under my control, I can confidently say that if ample allowance is made for the varying number of strokes per minute, this great fluctuation of duty cannot be accounted for in the general condition of the machinery; and again, referring to Wicksteed, he found in testing a very large heap of coal, it varied no less than 44 per cent.

Considering the very bad conditions under which most of the engines have to work in Cornish mines with the shafts very deep, and extremely crooked, in which also are all sorts of angles, the duty taken as a whole will, I venture to say, be better, all things considered, than any other mining area having an equal number of engines.

Consider for a moment extracts taken from a paper given by Mr. Dagald Baird at the Mining Institute of Scotland, and issued in May this year, in which he says:—"The question of extracting water from a mine is a most important one, and is becoming more important as mines get deeper and more difficult to drain. It is, therefore, of consequence that we should be well informed as to the best practice in pumping. When it is said that there are to the writer's certain knowledge many pumping engines giving as low as 10,000,000 foot pounds duty for every hundredweight of Welsh best coal, or coal of equal quality, consumed."

In the same paper he gives a table showing a test of four engines as follows:—"Ball engine, 100 inches diameter of cylinder, pumping 900 feet deep, boiler pressure 53 lbs., duty 50.26 millions, age of engine 18 years. Davey differential underground pumping 900 feet deep. Boiler pressure 53 lbs., duty 41.36 millions, age of engine 2 years. Davey differential compound cylinders, 33 and 52 inches diameter, pumping 600 feet deep. Boiler pressure 80 lbs., duty 69.7 millions, age of engine 8 years. Compound bull cylinder, 28 and 48 inches diameter, pumping 504 feet deep. Boiler pressure 77 lbs., duty 35.8 millions, age of engine 6 years. The average duty of the whole is, therefore, 49.29 millions. All the engines are marked good, and the tests lasted from four to six hours only. The feed water passed into the boilers at 130, 125, 118, and 140° Fahr. respectively, and the duty was reckoned on an evaporative power of 10 lbs. water per lb. of coal. This quality here, in Cornwall, would be considered very good.

The above duty, as described by Mr. Baird, cannot be said to be even moderate, looking at the fact that the pits are comparatively shallow and vertical, and the engines, except one, practically new.

(To be continued.)

YORKSHIRE MINERS' STRIKE.—The miners at the Wharfedale Collieries came out on strike on Tuesday.

MESSEHS H. BINKO AND CO. inform us that owing to increased demand for their articles, they have acquired additional premises at No. 120, Moles, E., where all machinery will be exclusively worked by electric motors.

"The Wire Rope and its Applications." By W. E. Hipkins, managing director of J. and E. Wright (Limited), Universe Works, Birmingham.

NOTES FROM BRITISH COLUMBIA.

(FROM OUR OWN CORRESPONDENT.)

AFTER investing a good many millions in West Australia, the speculators are beginning to find that the mining laws of that torrid colony are "unbearable." In British Columbia we suffer considerably from an incapable Ministry. There are absolutely no party divisions, and as the gentlemen who form Her Majesty's Opposition in this province have not given signs of possessing a grain more of ability than those who sit in office, it does not appear that the suffering miner is at all likely to obtain any relief if a change of Government should take place. An instance showing how mining and other legislation is conducted in this province occurred last Session. A Mineral Bill had been drafted and passed through its initial stages, and it was in good shape to make a decent Act. During the last day or two of the Session, when Bills were being slaughtered wholesale, and business generally was being violently rushed along, the Attorney-General comes down at 12 o'clock at night with some important amendments to the Mineral Bill, and there and then gets them inserted, and the Bill passed, without giving the mining members, much less the mining community, a moment to consider them.

In spite of this, however, we are a good deal better off than West Australians. The laws are liberal in the extreme, and if some points in them are inexplicable and others contradictory, they aim at giving the poor man an equal chance with the rich, and enable him to acquire at a small cost a sufficient mining area.

The main outlines of British Columbia mining laws are as follows:—Everyone engaged in mining is compelled to have a license, known in Australia as a miner's right. The fee for this is \$5 per annum. Failure to renew the license on or before the day it runs out involves a forfeiture of all mining property, except such as is held under a Crown grant. Provided with this license the free miner, as he is termed, may wander where he pleases and stake out claims of 1500 feet square, nearly 52 acres, but he is not permitted to locate more than one claim on each separate vein or lode. If he desires to stake out a claim on private lands he has to put up security for any damage he may do to the owner thereof through his working. Having staked out a claim he must record it at the Recorder's office within 15 days, with an allowance of one day extra for every 10 miles distance from the Recorder's Office. The fee for this record is \$2.50 (10s.). Having recorded his claim he becomes the holder of a lease over it, which requires \$100 worth (\$20) of work every year to hold it. When a group of adjoining claims is held in partnership, the yearly assessment work for all the claims may, with the consent of the Gold Commissioner, be done on any one of them. When five years' work has been done—that is, when \$500 (£100) altogether has been expended on the property, the holder becomes entitled to a Crown grant of it. He has, however, to pay, in addition, the cost of the survey, which varies, of course, with different claims, but may be roughly estimated at \$250 (£50). The law permits a miner to pay the value of his yearly assessment into the Recorder's Office, instead of doing the work on the property, and as the value of the five years' work may be paid all at once, there is nothing to prevent a Crown grant being issued at once, except the time necessary to make a survey of the claim. A further protection is granted to the miner, who may not desire to pay up all his assessments at once by Clause 23 of the Act, which provides that "no irregularity happening previous to the date of the record of the last certificate of work shall affect the title, and it shall be assumed that up to that date the title to such claims was perfect, except upon suit by the Attorney-General based upon fraud." This clause was inserted to put a stop to all the tricks of the claim jumper, and it was badly wanted. The owner of a mineral claim is entitled to "all surface rights, including the use of all timber thereon for mining and building purposes in connection with the working of the said claim, so long as he holds the said claim, for the purpose of developing the minerals contained therein, but no longer."

Such is the gist of the mining laws of the province so far as they relate to quartz mining, and it may fairly be said that they are liberal in the extreme. Put shortly, a mineral claim of 52 acres can be bought right out for £150.

After one of the longest spells of fine weather ever known, winter came in during the first week in November, and drove the prospectors out of the hills. The record of mining events during the next six months will be mainly confined to the amount and value of ore actually shipped. In the Slokan there will be nearly 40 mines at work, at Ainsworth three or four. At Nelson, the great Silver King will probably rather increase than decrease its output, and at Rossland there may be 10 or a dozen more.

The Red Mountain Railway is practically finished, and has already reached some of the outlying mines. This line is a branch from the main line running between Nelson and Spokane. The country through which it passes, though hilly, is not mountainous, and the route is free from avalanches, snowslides, as they are locally called, which interfere with railway traffic in other parts of the district. The completion of this line gives the mine owners of Rossland the choice of several smelters. To begin with, it gives them direct communication via Spokane with all the railway systems of the United States, and it connects them also with Nelson, where the Hall Mine's smelter is preparing to treat large quantities of their ore. In addition, they have the narrow gauge line running to the smelter at Trail, 7 miles away on the Columbian River. So many mines in this district have been importing machinery, and doing dead work during the summer, that a large output may reasonably be looked for.

Mr. H. W. Forster, M.P. for Seven Oaks, who has been in this country for some months, has purchased two-thirds of the Ruth Mine. The price paid was \$168,668, practically cash. The remaining third is still held by the original owners, Messrs. W. K. and D. E. McVay. It is reported that they are asking \$100,000 for their portion. The Ruth is one of the later Slokan Mines to come into the shipping market. A year ago it was little better than a prospect, but its owners wisely set to work opening it up, and to-day it has four tunnels at different elevations disclosing a magnificent vein of galena, rivaling that of its neighbour, the celebrated Slokan Star. The Ruth is close to the town of Sandon, where it has the choice of two lines of railway. It will probably rank as one of the greatest of the Slokan mines.

Mr. Callahan, representing an English syndicate, is vigorously pushing on work on the Galena Farm, a claim on Four Mile Creek, which runs into the Slokan Lake. A concentrator will be built, and the mine will soon ship ore. The same people have also bought the R. id and Tend foot, two claims on the divide between the Slokan Lake and Sandon Creek.

The London and British Columbia Gold Fields (Limited) has a force of men at work on the R. publican group of claims on Crawford Creek. This stream empties into the east side of Kootenay Lake, behind Pilot Bay. The claims are some distance, about 13 miles, from the water, but a good trail has been

made up to them which can easily be made into a wagon road, or even a tramway.

There seems to be every possibility of the Crow's Nest Pass line being commenced next spring, and the people of Victoria and Vancouver are making a strong movement in favour of a line direct from the coast to Kootenay. The distance, as the crow flies, is about 250 miles, and there are several serious physical obstacles in the way. It is felt that the Crow's Nest Pass line will tend to drive the trade of Kootenay away from the cities of British Columbia in favour of the mountains of Eastern Canada. There are now some 20,000 people in Kootenay, and new comers are rapidly pouring in. There is every appearance of a big rush in the near future, and the trade is worth struggling for. The British Columbia line will also traverse some of the richest agricultural and pastoral districts of the province, the produce of which will find a ready sale in the mining country. Should this railway become an accomplished fact, it will probably lead to extensive smelting business at Vancouver.

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Office, Liskeard, Cornwall, writes December 10:—"The mining market is dull, and devoid of any inquiry for shares, on the further reduction of tin. Prices mostly nominal. Quotations:—Basset United (Limited), 17s. to 18s.; ditto (5s. paid), 4s. 6d. to 5s.; Blue Hills, 2s. to 2s. 6d.; Carn Brea United (Limited), 1s. 6d. to 2s.; Durno Consols, 17s. to 18s.; Dolcoath (Limited), 16s. to 17s.; ditto (10s. paid), 7s. to 7s. 6d.; East Pool, 16s. to 17s.; Killifreth (Limited), 3s. to 3s. 6d.; Levant, 3s. to 3s. 6d.; West Kitty, 2s. to 2s. 6d.; Wheal Grenville, 4s. to 4s. 6d.; Wheal Kitty, 2s. to 2s. 6d.

Messrs. ABBOTT and WICKETT, Stock and Share Brokers and Mining Share Dealers, Redruth, write under date of December 10:—"The Cornish share market has been rather low in tendency during the past week, a few shares having been pressed for sale. However, still continues on a limited scale. Quotations herewith:—Blue Hills, 1s. to 2s.; Basset (Limited) (fully paid), 17s. to 18s.; ditto (5s. paid), 4s. to 5s.; Dolcoath (fully paid), 16s. to 17s.; ditto (10s. paid), 6s. to 7s.; East Pool, 16s. to 17s.; Polberron, 4s. to 4s. 6d.; West Kitty, 2s. to 2s. 6d.; Wheal Grenville, 4s. to 4s. 6d.; Wheal Kitty, 2s. to 2s. 6d.

MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write December 10 (noon):—"The past week's record is not a favourable one in most departments of rail, the English section being mostly effected on the pending labour trouble. Naturally the heavy lines have suffered the most with London and North-Western well to the fore in the drop on the very ill advised actions of the directors in this matter. American and Canadian have declined in majority. In the case of American Milwaukee and Louisville quote a little better, and also do New York Central and Union Pacific, but the rest of the changes are adverse. In Canadian's Trunk First and Second Preference are just a turn better, but the Ordinary and the Third Preference each quote fractionally lower. Dealing with the daily details, we have to report as follows:—

On Friday last home rails were very irregular, but changes were fractional on either side. Americans began pretty well and price held up fairly well, although there was very little business doing. Canadians also showed a little stronger. Saturday last was a very idle day, and tone of prices were dull as a consequence. Home rails began to feel the effect of trouble in the labour market, Americans slightly easier. On Monday home rails all went easy, with the single exception of South Eastern Deferred, which were marked up ½. In Americans and Canadians figures remain without change save for Union Pacific, which were put up nearly ½. On Tuesday idleness was the prevailing feature, with lower prices in all departments of rails. Yesterday dullness still prevailed, and figures again showed some falling off. As regards home rail, the labour question is raling the market, and for the present completely dominating the market, quite overshadowing the results of the half year's traffic down to the present with their consequent likelihood for dividend. Americans just on the better side, but little doing. No chance of moment in either direction in Canadians or Mexicans. To-day's traffic returns would doubtless have an inspiring effect in prices were it not for the trouble looming ahead. This morning there is no lifting of the gloom, and consequently markets remain in a very dead tone. Coming now to the further classes in the market, Consols are put down ½ on the week. In colonial stocks the only change is a rise of ½ in Victoria Inscribed. In corporation stocks and debentures the only changes are in the upward direction, these ranging from 1 to 1 ½ per cent. Foreigners, the only feature of this market, are a fall of 2 ½ in Italian Rentes, and rise of 1 in Brazilian Four and a-half per Cent., and 1 ½ in ditto Four per Cent. Rest of alterations are fractional and contradictory as will be seen below. Banks are better where altered in amounts ranging from ½ to ½. Insurance but little changed, with declines rather in majority. In coal and iron, &c., Cammells are exceptionally better with a rise of 2 ½. Other changes small in amount and about evenly divided between higher and lower. Breweries mostly better again, but Alsop's are on the other side with a fall of 1 ½. In miscellaneous, gas concerns are easier, Gas Light and Coke A being 2 to 4, and Imperial Ottoman being 6 down. Manchester Carriage A and Bisses quote again lower. The advances are all in very small fractions. Full particulars hereunder:—

ENGLISH RAILS.—Lower: Corns, ½; Great Eastern, 1; York Deferred, 1 ½; Great Western, 2; Leeds, 1 ½; Brighton A, ½; Chatham, ½ to 15-16; London and North Western, 2 ½; Sarum, ½ to 1; District, 1; Mid ands, 1 ½; North British, 1 ½; Berwick, 1; Dover A, ½.

CANADIANS AND AMERICANS.—Higher: Milwaukee, ½; Louisville, ½; New York Central, 1; Union Pacific, ½; Grand Trunk First Preference, ½; ditto Second Preference, ½; Lower: Atlantic, ½; ditto Preference, ½; Central Pacific, ½; Danvers, ½; Missouri, ½; Erie, ½ to ¾; Ontario, ½; Norfolk Preference, ½; Reading, ½; Canadian Pacific, ½ to ¾; Grand Trunk Ordinary, 1-16; ditto Third Preference, ½.

CONSOLS.—Lower: Two and Three-quarter per Cent., ½. **COLONIAL STOCKS, &c.**—Higher: Victoria Inscribed, ½. **CORPORATION STOCKS AND DEBENTURES.**—Higher: Birmingham Three per Cent., 1; Hull Three and Half per Cent., 3; Liverpool Three and a Half per Cent., 1; Manchester Three per Cent., 1; Nottingham Three per Cent., 1.

FOREIGNERS.—Higher: Brazilian Four and a-half per Cent., 1; Portuguese Four per Cent., 1 ½; Egyptan Unified, ½ to ¾; Uruguay Three per Cent., ½; Russian Four per Cent., ½; Argentine Six per Cent., ½ and a-half per Cent., ½ to ¾. Lower: Argentine Six per Cent., ½; ditto Five per Cent., ½; Italian Rentes, 2 ½; Spanish Four per Cent., ½ to ¾; Tarks D, ½.

BANKS.—Higher: Adelphi, ½; National Provincial, ½; City of London, ½ to ¾; Parr's, ½. **INSURANCE.**—Higher: British and Foreign Marine, ½; Manchester Fire, 1-16; Lower: Liverpool, London, and Globe, ½; Reliance Marine, 1-16; Royal, ½; Union Marine, 1-16.

COAL, IRON, &c.—Higher: Cammells, 2 ½; Bobb Vale, 1-16; Fletcher Russell, ½; Sheepbridge A, ½; ditto B, ½. Lower: Bolckow (£20 paid), 1 16 to 16; ditto (£12 paid), 1-16; Dorman Long, ½ to ¾; Tredegar A, ½.

TELEGRAPHS AND TELEPHONES.—Lower: Eastern Debenture, 1. Lower: Anglo-American Preference, ½. **BREWERIES.**—Higher: John Baxters, ½; Bentley's, ½; Hardy's, ½; Tamplin's, 1; Threlfalls Preference, ½. Higher: Albury, 1 ½.

MISCELLANEOUS.—Higher: Blackpool Victoria Pier, 1-16; Coats & Fowler Brothers, 2; Lever Brothers Pref., 2; Salt Union, 1-16; United Alkali, 2; Lower: Bowman Thompson, 2; Bradbury's, 2; United Alkali, 2; Manchester Palace of Varieties, 6d.; Gas Light & Cold Steam, 2; Manchester Continental Gas, 6; Globe Telegraph, 2; A. 2 to 4; Imperial Continental Gas, 6; ditto B, 2; Northern Asset, 1s. Manchester Carriage A, 1; ditto B, 2.

LATER (4.0 P.M.).—The tone has been rather better to-day in most departments, home rails principally. Americans opened fairly well on quotations from the other side, and the improvement has been maintained down to the last. In Canadians, Pacifics quote a little better, but Trunk issues are quoted with change, notwithstanding the traffic increase of £4794.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, stockbroker and ironbroker (December 10) writes:—During the past week the market has been quiet. The money market continues easy, foreign politics quiet, and trade returns favourable, so that indications point to better prices.

In shares of coal, iron, and steel companies prices are steady. The Marbella output for November has been 1469 tons. Steel Company of Scotland are at 6 to 6½, Stewart and Clydesdale 13½, and Wilson and Clyde 8½.

In shares of copper concerns prices are easier. The prospectus of a new Californian company, called the Mountain, has been issued with a capital of £1,250,000 in shares of £5 each, which are a little quoted at a small premium. Tinto and Tharals are both a little easier.

In shares of gold and silver mines a fair amount of business has been done. Confidence is far from restored in this section, but the tendency is no doubt upwards. This is partly due to the Goldenbelt Deep return for last month, 6637 ounces, which shows a considerable improvement, and also to the Nigel Deep, having struck the reef at 686 feet, assaying 3 ounces 11½ dwts. per ton. Chartered improved from 41s. 3d. to 45s. 6d., Consolidated from 7½ to 8½, East Rand from 65s. to 80s., and Rand from 7½ to 8½, East Rand from 65s. to 80s., and Rand from 7½ to 8½, but the best prices for the week have not been maintained. The prospectus of the Northern Territories Gold Fields of Australia has been issued. The shares are being offered at £3 each, and are being freely dealt in at £4. African Recovery are at 11s.; Abbott's, 3s.; Associated Southern, 20s.; Afrikaander, 20s.; Anglo-African Gold Prospecting, 12s. 6d.; Barretts, 12s.; Bantjes, 37s. 6d.; Big Blow, 6s. 3d.; Broken Hill, 60s. 6d.; Blue Spur, 9s. 9d.; Brilliant and St. George, 30s.; Belsawo Syndicate, 18s. 9d.; Central De Knap, 9d.; Cripple Creek Pioneer, 30s.; Doornkop, 3s. 3d.; Emma, 1s. 3d.; Florence, 15s.; Frontino, 30s.; Golden Arrow, 12s.; Golden River Queensland Preference, 15s.; Golden Gate C.T., 1s. 3d.; Gold Fields of Namibie, 18s.; Golden Horseshoe, 35s.; Golden Pah, 3s.; Gwelo, 9d.; Glenrock, 1s. 3d.; Gleeson's, 13s. 3d.; Hauraki Associated, 3s.; Hansas Star, 18s. 9d.; Hainault, 14s. 6d.; Hampton Pains, 52s. 6d.; Hill Mines, 80s.; Hit or Miss, 17s. 6d.; Johannesburg Consolidated, 47s. 6d.; Jokers, 7s. 6d.; Kimberley Roadport, 41s. 3d.; Kempin, 1s. 6d.; London and Paris Financial, 20s.; Lally Shenton, 41s. 3d.; Langsate Royal, 15s.; Lisbon, 5s. 3d.; La Plata, 9d.; Mainland, 36s. 3d.; Marchison Gift, 6s. 9d.; Mount Margaret, 22s. 6d.; North Oroydon, 3s. 3d.; New Steyn, 22s. 6d.; North Boulder, 17s. 6d.; Newfoundland Realisation, 2s. 6d.; Orion, 15s.; Pearl Central, 18s. 9d.; Porges, 20s.; Randt, 4s. 6d.; Rhodesia, 19s.; Sumbur, 2s.; Violet, 15s. 6d.; Victory, 1s. 9d.; West Australian, 1s. 9d.; and General Finance, 41s.; West Australian Trading, 2s.; White Feather Main Reef, 7s.; and Zambesi Exploring, 37s. 6d.

In shares of miscellaneous companies prices are steady. In oil companies, Broxburn are at 9½, Pomphreton 6½, and Young's 27s. 6d. Coalbrook Alkali Preference offered. Nobel's Dynamite lower at 11-16 on reported death of the inventor. Roburite Explosives 8s.

EDINBURGH.

MEMOR. THOMAS MILLER AND SONS, Stock and Share Brokers, 69, RANVIER-STREET, EDINBURGH, report as follows under date of December 10:—The railway market has since the date of last week's report been shaken by the labour agitation. Caledonian Deferred has fallen from 59 15-16 to 58 5-16, North British from 47 13-16 to 46 1-16, Highland from 93 to 92. There have been comparatively few changes in insurance shares. Caledonian are fractionally better. City of Glasgow have risen from 12½ to 12¾, Scottish Union A from 86s. 9d. to 87s., ditto B from 17 1-16 to 17½. Standard Life have fallen from 54½ to 54. The changes in iron and coal shares are unimportant. In copper shares, Arizona has changed from 54s. 3d. to 53s., Rio Tinto from 24½ to 24 1-16, Tharsis from 26 to 25 17-16. Broxburn Oil shares have improved from £9 6s. to £9 8s. Pomphreton Oil from 6½ to 6 13-16. Distillers have risen from 20 1-16 to 20½. Edinburgh United Breweries have declined from 14½ to 14. J. and P. Coats have changed from 61½ to 61¾.

THE IRON AND STEEL MARKETS.

MEMOR. JOHN STEVENSON AND COWPER'S weekly report, dated Middlesbrough and Newcastle-on-Tyne, December 10, states:—There has been a gradual falling away in prices of warrants during the past few days, and the market closed this afternoon at considerable reductions as compared with last week. This is commonly attributed to speculative operations and the effect of approaching holidays, but there appears to be a scarcity of work to follow orders which at present are affording full employment, and this applies especially to shipbuilding. In the meantime, stocks in public stores are being reduced both here and on the West Coast, and shipments from Cleveland, though 7000 tons below those of November, are as much above the average of the past four years. There is very little being done in local iron, and makers are generally adhering to 41s. for No. 3, although second-hand holders are taking 6d. or 9d. less for prompt clearance. Hematite is quoted 48s. 6d.—49s., but 50s. has been paid for forward delivery. Spanish ore supplies are improving, but imports are not yet sufficient for all the furnaces recently making this quality. Finished iron and steel stand at recent quotations both for heavy and light sections. Coke is firm for next year at 13s. 6d., and coal in good demand for gas and manufacturing purposes at a slight improvement in price. The Glasgow market closed this afternoon steady, small business. Scotch 48s. 1d., Cleveland 40s. 1d., Cumberland Hematite 50s. 3d., and Middlesbrough Hematite 48s. 4d., cash sellers.

MEMOR. BARRY, HEAD, and Co's weekly report, dated 28, Lombard-street, E.C., December 10, states:—The price of finished materials remain practically as last reported. A rather weaker tendency is manifest, and new orders are coming in but slowly. Works continue busy, however, on orders already booked, and we look for better things after the New Year.

INSTITUTION OF MINING AND METALLURGY.—The third ordinary meeting of the sixth session will be held on Wednesday, December 16, in the Lecture Theatre of the Geological Museum, Jermyn-street, S.W., at eight o'clock, when the following papers will be read and discussed:—(1) "On the Drilling of the Besidenite Borehole, near Johannesburg," by Mr. John A. Chalmers, M.Inst.M.M. (2) "Notes on the Treatment of the Gold Ores of the Guanaco Mineral District, Desert of Atacama, Chile," by Mr. G. M. Barber, M.Inst.M.M.

CLEVELAND INSTITUTE OF ENGINEERS.—Mr. Percy C. Gilchrist, A.R.S.M., F.R.S., will read a paper on the "Bertrand-Thiel Process," before the institute, at Middlesbrough, on Monday, December 14.

MEMOR. SCHRAM and Co. announce that they have removed from 174, Great George-street, to Cannon-street House, London, E.C.

BOARD OF TRADE RETURNS.

NOVEMBER TABULAR STATEMENT.

Specially compiled for "The Mining Journal" from the Board of Trade Returns.

THE Returns issued on the 7th inst. show that the Imports amounted to £42,502,969, an increase of £2,456,028, and that the Exports totalled £13,539,853, a decrease of £1,000,480, compared with the corresponding month last year. For the 11 months ended November 30 the Imports were £298,303,740, an increase of £18,533,717, and the Exports £219,631,003, an increase of £12,641,367, compared with the corresponding period of 1895. The Exports of Foreign and Colonial Merchandise show an increase of £16,381 for the month, and a decrease of £4,089,864 for the 11 months, the totals being £4,380,431 and £57,853,853 for the one and 11 months respectively.

EXPORTS.—SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES		VALUES.	
	INCREASE.	DECREASE.	INCREASE.	DECREASE.
Raw Materials:				
Coal and Patent Fuel ... Tons	—	24,790	—	66,992
Coal, &c., shipped for steamers' use ... Tons	74,461	—	—	—
Metals:				
Brass, and manufactures of	1,664	—	5,562	—
Copper, unwrought and wrought ... Cwts	—	42,513	—	89,391
Hardware and cutlery ... f	—	—	3,663	—
Implement and tools, and parts thereof ... f	—	—	—	2,949
Iron, unwrought and wrought ... Tons	45,733	—	174, 66	—
Lead, pig, rolled, &c. ... f	—	374	—	3,807
Plates, and plated gift wares & Telegraph Wires, &c. ... f	—	—	—	1,516
Tin, unwrought ... Cwts	1,679	—	2,033	—
Zinc or Spelter ... f	—	9,921	—	5,161
Other Articles ... f	—	—	1,406	—
Total ...	—	—	187,005	121,914
	—	—	124,914	—
Machinery:				
Steam engines ...	—	—	—	3,350
Other descriptions ...	—	—	159,271	—
Total ...	—	—	159,271	31,350
Alkali ... Cwts	—	229,356	—	48,416
Cement ... Tons	—	6,304	—	11,136
Products of Coal ... f	—	—	18,984	—

EXPORTS.—BRITISH AND IRISH PRODUCE.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES		VALUES.	
	Month ended Nov. 30.	Month ended Nov. 30.	1895.	1896.
Metals and Articles Manufactured therefrom (except Machinery):	1895.	1896.	1895.	1896.
Brass, and Manufactures of, not being Ordnance ...	9,105	10,769	3,907	44,591
Copper: Unwrought, in ingots, cakes, or slabs, and Precipitate:				
To Germany ...	14,942	7,038	37,846	18,2 8
"Holland ...	18,718	4,226	44,374	10,6 5
"Belgium ...	4,844	1,880	11,127	4,9 6
"France ...	9,432	4,833	23,311	12,144
"Italy ...	1,701	3,501	3,929	9,3 8
"British East Indies ...	31	22	80	5 1
"Other countries ...	5,795	3,704	13,552	9,1 6
Total ...	54,723	25,301	132,569	64,655
Wrought, or Manufactures, unenumerated:				
To Sweden and Norway ...	2,283	2,727	6,693	8,781
"Germany ...	641	217	1,797	1,1 23
"Turkey ...	1,995	3,437	5,010	9,977
"Egypt ...	7,274	3,198	6,2 5	8,925
"Brazil ...	2,482	1,395	7,280	4,401
"British East Indies ...	8,909	1,248	23,334	4,657
"Australasia ...	6,110	3,105	3,197	9,8 7
"Other countries ...	1,814	6,974	20,274	23,27
Total ...	26,468	22,191	74,4 4	70 0 2
Mixed or Yellow Metal:				
To China and Hong Kong ...	798	882	1,909	7,200
"British East Indies ...	22 8 7	15,219	48,940	34,790
"Other countries ...	6,363	4,920	14,511	11,645
Total ...	29,981	21,021	55,760	49,595
Total of Copper ...	111,122	68,919	273,733	184,342
Hardware and Cutlery ...	—	—	14,966	17,323
Implement and Tools, and parts thereof ...	—	—	119, 35	116,006

Iron and Steel: Pig iron:	Tons.		£	
	1895.	1896.	1895.	1896.
To Russia ...	1,819	2,071	5,537	7,082
"Sweden and Norway ...	4,319	6,583	9,541	1,014
"Germany ...	1,900	3,900	3,982	6,338
"Denmark ...	20,568	34,750	43,974	73,688
"Holland ...	11,081	21,071	22,760	45,442
"Belgium ...	2,746	14,652	8,767	3,168
"France ...	3,329	3,806	8,344	8,078
"Portugal, Azores, & Madeira ...	1,748	270	3,119	621
"Spain and Canaries ...	231	51	1,799	128
"Italy ...	9,353	4,511	20,641	11,819
"United States ...	9,116	581	49,865	3,122
"Australasia ...	1,466	2,187	4,223	6,722
"British North America ...	934	6 6	3,159	1,732
"Other countries ...	5,231	5,271	21,438	13,815
Total ...	67,016	99,025	206,694	228,357

Bar, angle, bolt, and rod	Tons.		£	
	1895.	1896.	1895.	1896.
Railroad of all sorts ...	33,617	56,524	169,723	271,636
Wire, iron and steel &c. ...	4,385	4,286	63,038	70 6
Hoops, plates, boiler plates, &c. ...	7,724	9,510	53,055	66,724
Galvanized sheets ...	18,924	18,717	219,238	211,821
Cast and wrought iron, &c. ...	25,924	30,345	400,351	420,351
Old, for re-manufacture ...	8,034	5,652	21,653	13,599
Steel, unwrought ...	23,838	20,500	199,362	224,518
Black plates for tinning ...	2,811	4,515	27,327	44,704
Manufactures of steel, or of iron and steel combined ...	1,673	1,712	55,300	56,615
Total of iron and steel (including tin plates and sheets) ...	253,234	298,972	1,781,441	1,957,206

Tin Plates and Sheets:	Tons.		£	
	1895.	1896.	1895.	1896.
To Russia ...	1,666	5,216	2,178	14,709
"Germany ...	504	1,412	6,183	18,283
"Holland ...	508	457	6,395	5,439
"France ...	603	1,199	9,969	14,464
"Portugal, Azores, and Madeira ...	883	295	10,480	4,219
"Italy ...	38	319	515	3,340
"Roumania ...	466	278	5,762	3,441
"United States ...	18,185	5,810	181,518	65,627
"Brazil ...	524	391	6,332	4,260
"Argentine Republic ...	517	282	5,858	2,939
"British East Indies ...	779	685	7,186	8 9
"Australasia ...	1,435	958	15,716	10,737
"British North America ...	31 2	4,163	34,845	42,714
"Other Countries ...	2,617	2,338	30,815	26,751
Total ...	30,665	23,774	318,477	362,811

Lead: Pig Sheet, Piping, and Manufactures:	Tons.		£	
	1895.	1896.	1895.	1896.
To Russia ...	292	329	3,790	3,799
"Germany ...	79	56	893	985
"China and Hong Kong ...	511	217	1,820	7,482
"Japan ...	2 7	67	7,984	907
"United States ...	181	—	1,420	—
"British East Indies ...	740	795	11,130	11,027
"Australasia ...	34	116	713	1,727
"British North America ...	28	249	393	3,076
"Other countries ...	5 1	720	10,750	9,247
Total ...	2,923	2,549	87,890	88,481

BRITISH AND IRISH PRODUCE—Continued.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Nov. 30.	Month ended Nov. 30.	1895.	1896.
Plate & Plated & Gilt Wares: Telegraphic Wires, & apparatus connected therewith ...	—	—	44,693	43,177
Tin, Unwrought:				
To Russia ...	2,855	2,908	7,712	8,971
"Sweden and Norway ...	1,024	1,441	3,516	4,466
"Germany ...	687	733	2,305	2,3 6
"France ...	889	1,222	3,019	3,855
"Turkey ...	443	953	1,549	3,033
"United States ...	331	188	1,147	5 8
"British North America ...	162	2 84	5,225	6,631
"Other countries ...	3,573	2,904	14,510	9, 48
Total ...	10,774	12,453	77,010	39,018

Zinc or Spelter: Unwrought and Wrought	Tons.		£	
	1895.	1896.	1895.	1896.
Total of Principal Articles ...	—	—	2,593,746	2,654,431
Total of Metals and Articles Manufactured therefrom (except Machinery) ...	—	—	64,752	66,138
Alkali ... Tons	—	—	2,658,478	2,720,569
Cement ... Tons	—	—	1 5,807	107,161
Products of coal (including paraffin, petroleum, &c.) ...	—	—	51,562	40,426
Total ...	—	—	143,856	165,640

MACHINERY.

Mining: (Not Steam Engines, &c.)	Nov. 1895		Nov. 1896	
	1895.	1896.	1895.	1896.
To Countries in Europe ...	£ 2,368	£ 2,717	£ 1,125	£ 2,824
"United States ...	4,031	2,712	2,517	1,211
"Countries in South America ...	44,458	45,158	440,413	533,466
"British Possessions in S. Africa ...	7 2	6,170	33,410	59,482
"East Indies ...	13,818	9,275	69,776	227,335
"Australasia ...	1,026	6,561	11,429	56,144
"Other Countries ...	—	—	—	—
Total ...	65,4 4	69,908	637,562	950,818
Total of Machinery other than Steam Engines ...	1,043,054	1,152,725	11,329,055	12,536,578
Total of Steam Engines ...	287,780	261,400	2,594,117	2,979,322
Total of Machinery and Mill Work ...	£1,325,534	£1,414,755	£13,893,172	£15,515,900

EXPORTS OF FOREIGN AND COLONIAL MERCHANDISE.

PRINCIPAL ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Nov. 30.		Month ended Nov. 30.	
	1895.	1896.	1895.	1896.
Copper:	Tons.	Tons.	£	£
Unwrought and part wrought	827	3 5	39,326	14, 88
Iron and Steel:				
Bar, angle, bolt, and rod ...	3,049	1,351	24,581	10,916
Steel, unwrought ...	154	17	4,557	153
Manufactures:				
Orders, beams, and pillars ...	54	81	524	821
Unenumerated ... Cwts.	97,610	4,511	57,422	47,925
Petroleum ...	129,400	127,000	4,371	4,958
Quicksilver ...	122,700	110,225	12,111	9,442
Saltpetre ...	Cwts.	Cwts.		
slabs	1,919	2,107	1,842	1,355
Tin, in blocks, ingots, bars, or slabs	32,108	46,774	103,287	139,131

GOLD MINING IN ONTARIO.

(FROM OUR OWN CORRESPONDENT.)

I FREQUENTLY hear the remark made "that nothing can be done with regard to mining during the winter months in Canada." As this appears to be the opinion held by most people, especially in England, it will be news to them to know that many of the mines will be vigorously worked during the period of frost and snow, and supplies are already being taken in for the different properties which are far enough advanced to warrant the working of the same. Of course, prospecting is entirely out of the question when snow covers the ground, but veins located and surveyed can be more easily and cheaply developed in winter than in the summer months. Machinery and supplies can be taken in over the ice, to almost any point, at a cheap rate not exceeding \$12 per ton, and even cheaper, should the property be situated near the railway, while the cost of taking the same supplies during the summer months would be almost double; and, with regard to development, shafts can be sunk at a cheaper rate, especially if there is surface water to contend with, as in winter this is frozen up.

The first annual meeting of the shareholders of the Law Bill Lake Gold Mining Company (Limited) was held in the Board of Trade rooms, Hamilton, and everyone holding stock in the company should congratulate himself on his good fortune at the prospects of handsome dividends that will assuredly come in the future. The opening up of this mine, and the wonderful showing of ore, has done much to attract attention to this district. Hundreds of acres of Crown lands have been acquired around the Law Bill Company, and some very rich veins have already been discovered. Everyone who has visited this property predicts a most promising future for it, and mining engineers are astonished at the wonderful richness of the ore. A stamp mill, together with the necessary machinery, will be erected as soon as possible. There are about 700 tons on the dump, and with the increased supply from the new levels this will be greatly added to. Early next year the company expect to have everything in readiness to treat 25 tons of ore a day, and keep the mill running continuously day and night. The shaft is down about 125 feet in a splendid body of ore from 5 to 7 feet wide. About 50 feet of drifting has been done at the 60 feet level, and the ore being taken therefrom shows free nuggety gold. An average assay of ore from the drifts went over \$170 per ton. Drifts will at once be started at the 120 feet level, and the work pushed with an increased staff of miners, under the able management of Mr. F. S. Wiley. An especial feature of the mine is that the ore not only increases in quantity, but improves in quality as greater depth is attained. In the shaft the vein carries a width in the south end of about 5½ feet, and in the north end of about 5 feet. On such a promising mine anything smaller than a 10 stamp mill would be out of the question—in fact, I think the company intend purchasing a larger one. An example of low capitalisation is illustrated in this mine, the capital being \$100,000. The stock stands to-day at a higher premium than any other mining stock in the market, and with earnings of from \$90,000 to \$100,000 per annum—which is a moderate expectation—the value of Law Bill stock will be increased tenfold in a few months.

Promising reports are also to hand of the Hawk Bay Gold Mining Company. This company is under the same management as the Law Bill Lake Company, and only lately formed. The property is situated about 5 miles south-east of the Law Bill Mine. About 20 men are engaged in preliminary development, sinking a shaft, &c., and a very rich body of ore has been encountered. The vein is perceptibly widening, and the character of the quartz shows marked improvement.

I have no personal interest in either of the above-mentioned properties, but it is pleasing to record a successful effort on the part of Ontarians to develop the mineral resources of their province. A successful mining enterprise is a sure magnet to attract capital, not only here but from abroad, and the best advertisement that there are exceptional openings in Ontario for investment with almost a sure chance of realising handsome profits. To make gold mining in Ontario a success, it is necessary to conduct mining operations so that they will stand the test of legitimacy, and create confidence in those who have money and are willing to back up mining operations. Americans are always ready to embrace a good chance, so that it will not be surprising to hear that they are well represented in the vicinity of the Law Bill Company. Several New York capitalists are interested in at least a dozen most promising properties. Some of them have been reported on by eminent experts, and have been pronounced as being of great value. Some of the leads average 100 feet in width, and are panning gold for the entire length.

Another promising district, in which a number of rich discoveries of gold have been found, is the Jackfish Bay, a little over a hundred miles north-east-by-east of Fort William. The country is very promising and not of a difficult nature to prospect. A large gold-bearing vein has been discovered a few miles east of Schreiber. Owing to the lateness of the season not much exploratory work has been done, but next spring vigorous prospecting work will be done. According to present indications the width of the belt is from 15 to 20 miles in width.

Many new mining companies are being formed for the purpose of carrying on operations in Ontario. Among them are the following:—The Gold Mining Company of Sudbury (Limited), with a capital of \$100,000; the Ontario Mines Development Company (Limited), with a capital of \$60,000; the Lake Superior and Leon Lake Mining Company (Limited), with a capital of \$99,000; the Preston Gold Mining Company of Seine River; the Heather Bell Gold Mining Company of Toronto (Limited); and the Rainy River Gold Mining Company (Limited).

As an instance of the world-wide interest which the gold fields of Ontario are creating, Mr. I. W. Southworth, of the Ontario Bureau of Forestry, has received a letter from his brother, at San Rafael, California, saying that capitalists there are anxious to furnish the necessary capital to put up stamp mills, and operate any gold mines in Canada on a percentage, providing the ore yields at least \$7 a ton. Prospectors, possessing a claim minus the necessary capital to work it, might find this a first-class opportunity, should the offer be bona fide.

RIVER LEVEL COLLIERY, ABERNANT, FLOODED.—On Wednesday night, a short time before the day shift at the River Level Colliery, Abernant, ceased working, a terrible inrush of water made its way to the Gellydydd seam, where some 120 men were working, and the stream of water rushing down the seam, which has a considerable dip, the men had great difficulty in making their escape. Ultimately, all but five men reached the surface in safety, many having to walk several yards through the water neck deep. Little or no hopes are entertained that those still in the pit will be saved.

The QUEENSLAND COLLIERIES COMPANY (LIMITED) have declared a dividend of 5 per cent. for the year ended June 30.

INDIAN MINES' OUTPUT FOR NOVEMBER.

THE output of the mines for November was 28,559 ounces showing an increase of 398 ounces as compared with the preceding month, and an increase of 6014 ounces as compared with the corresponding month of 1895. The production in ounces since the beginning of 1893 has been as follows:—

	1892.	1893.	1894.	1895.	1896.
January ...	11,674	16,844	17,026	19,672	29,986
February ...	11,780	16,856	18,803	19,358	27,418
March	11,579	17,463	16,080	20,257	26,171
April	11,813	18,287	15,551	20,399	26,866
May	12,488	17,922	16,543	20,797	25,840
June	11,847	16,879	15,459	20,839	25,751
July	13,277	16,676	18,271	19,280	26,119
August	14,854	16,692	19,073	20,704	26,739
September..	15,529	17,060	18,911	21,502	27,439
October ...	15,922	17,440	19,119	22,301	28,161
November..	15,942	17,557	18,825	22,545	28,559
December..	16,435	17,659	19,068	22,652	—

Total ... 163,140 ... 207,135 ... 209,729 ... 250,306 ... 292,599
The output in ounces of the individual mines for the past six months have been:—

	June.	July.	Aug.	Sept.	Oct.	Nov.
Mysore	8,955	9,038	9,133	9,328	9,331	9,341
Champion Reef 6,643	6,433	6,617	7,011	8,004	8,204	8,204
Ooregun	5,332	5,288	5,109	5,021	5,037	4,085
Nandhydroog... 3,589	3,803	3,918	4,080	4,081	4,076	4,076
Coromandel ... 620	710	720	810	792	800	800
Mysore W. and Wynand ... 422	452	474	285	371	384	384
Balaghat	306	211	237	182	278	225
Mysore Reef.. 94	—	—	137	128	203	427
G.F. of Mysore —	—	—	—	—	64	117

Total.....28,751 ...26,119 ...26,739 ...27,439 ...28,161 ...28,559

THE Association of Mines of the South African Republic have cabled to their London agents, the Robinson South African Banking Company (Limited), that for the month of November an output amounting to 41,369 ounces was obtained by the following companies:—Roodepoort United Main Reef, Meyer and Charlton, Princess Estate, Van Ryn, George Goch (Amalgamated), Wemmer, Langlaagte Estate, Block B Langlaagte Estate, Lancaster, Langlaagte Star, New Midas Estate, Porges Randfontein, North Randfontein. This compares with 35,970 ounces in the preceding month.

MR. ROBERT WARNER, Chartered Accountant, of 300, Winchester House, E.C., has been appointed liquidator of the Golden Link, Hesperus, and Eclipse Gold Mining Companies under the terms of arrangement for the amalgamation of these companies with the Golden Link Consolidated.

MR. H. L. SIMMONS, of Messrs. Bowes Scott and Co., mining engineers, is leaving this week for British Columbia.

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Norman (tw'n's'e)	—	—	—	January 2
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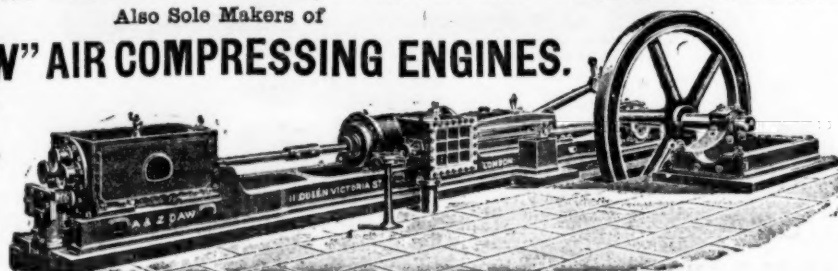
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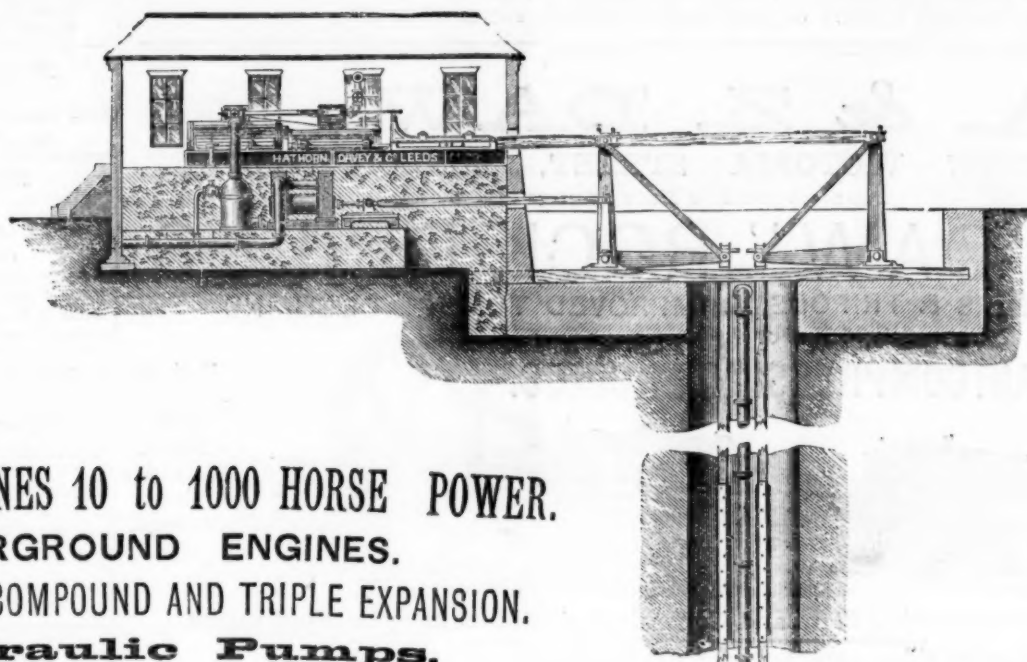
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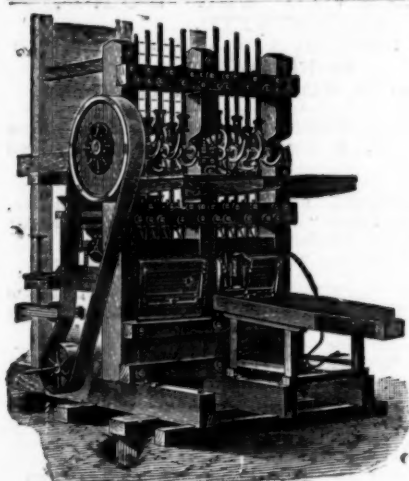
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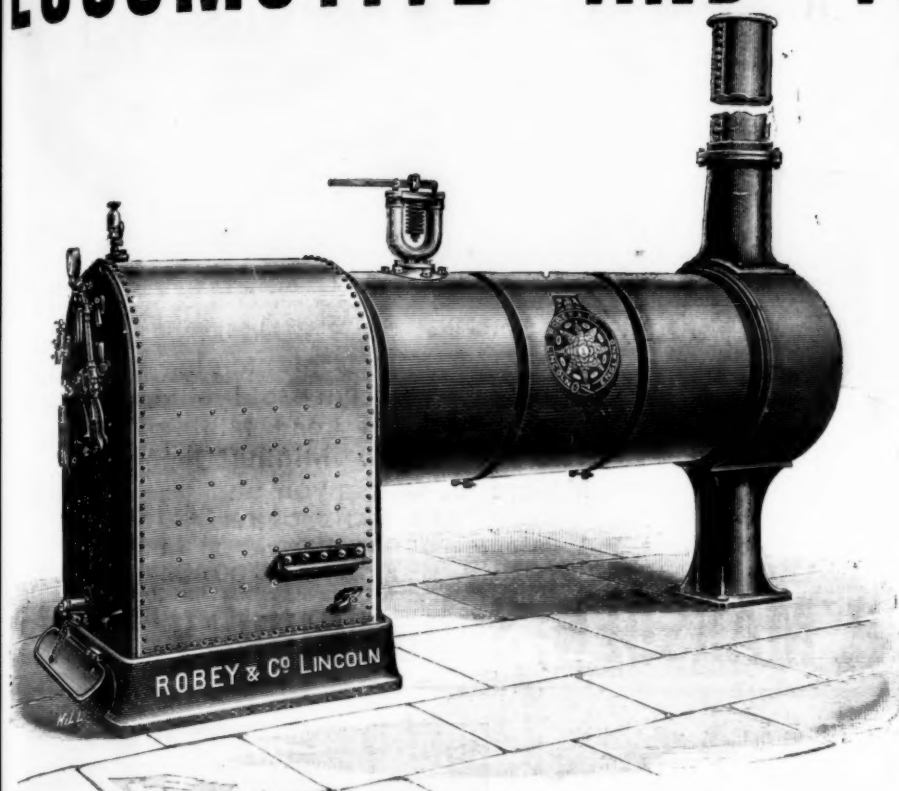
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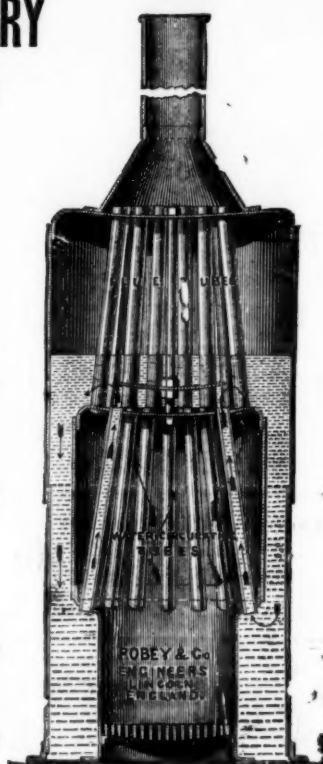


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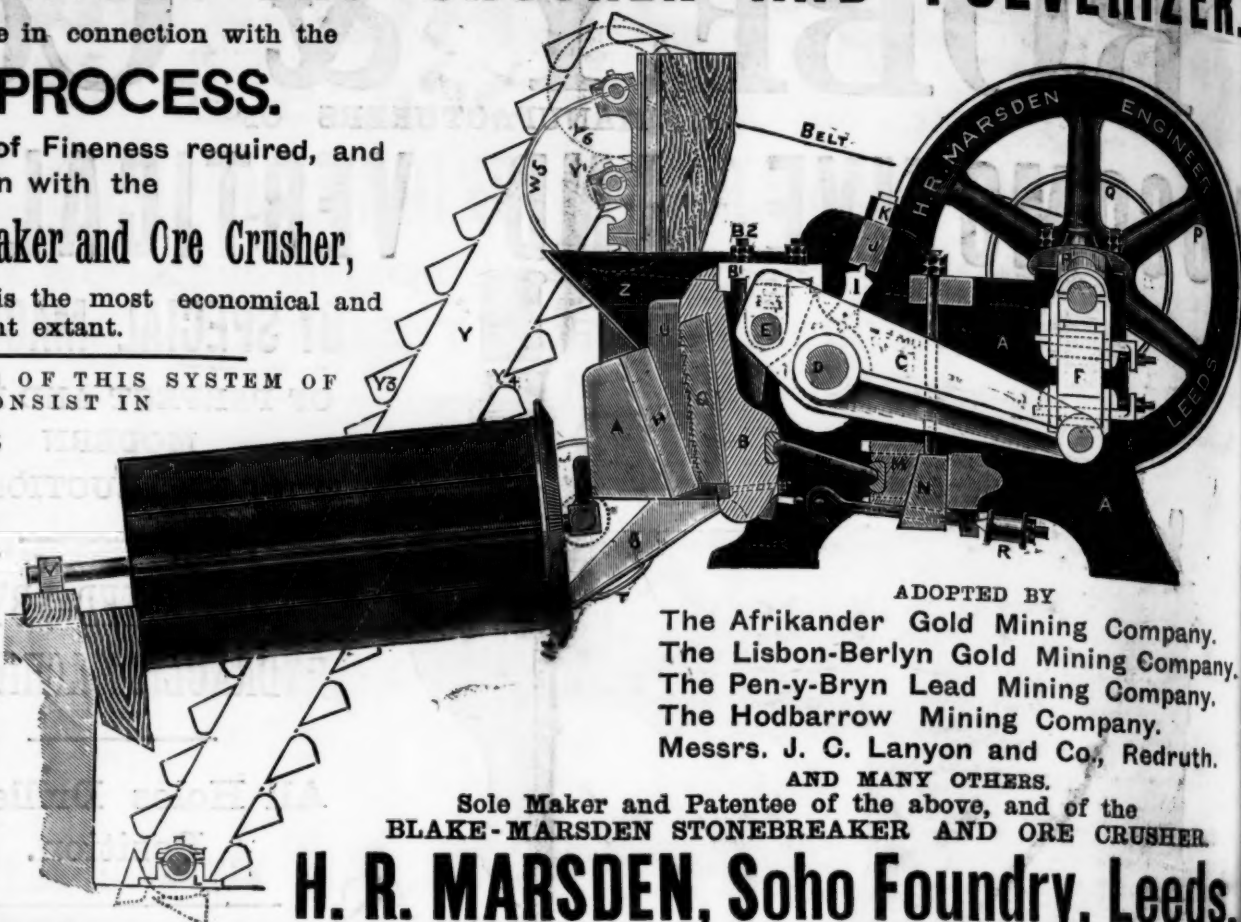
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